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# VOLATILITY AND PANIC IN THE NATION'S FINANCIAL MARKETS

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# HEARING

BEFORE THE

## COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

THE RECENT TURBULENCE IN THE STOCK MARKET (BLACK MONDAY, OCTOBER 19, 1987) AND TO EXAMINE THE CAUSES OF THE MARKET'S STEEP DECLINE

NOVEMBER 4, 1987

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# VOLATILITY AND PANIC IN THE NATION'S FINANCIAL MARKETS

WEDNESDAY, NOVEMBER 4, 1987

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
*Washington, DC.*

The committee met at 10:06 a.m. in room SD-538 of the Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Riegle, Sarbanes, Dodd, Dixon, Sasser, Sanford, Shelby, Graham, Wirth, Heinz, D'Amato, Hecht, Gramm, and Karnes.

Also present: Senator Domenici.

## OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

Chairman Ruder, let me first thank you for appearing before this committee to discuss the recent turbulence in the stock market. We know how very, very busy you are and what a trying time this is for you, and so we're very grateful that you've come before us to give us your opinion.

I also want to thank Senator Domenici, who should appear momentarily. And if you would permit, we would like him to testify first. He will only testify for a very few minutes.

Senator Domenici is one of our most valued Members of the Senate; he's a brilliant man, as you know. He's been the head of the Budget Committee and is now the ranking member. He's been engaged in the so-called summit that's been going on between the administration and the Congress and, presumably, that may have something to do with his delay.

I suppose there are about as many explanations for the stock market turbulence and the drop in the stock market on "Black Monday" as there are economists. To me, the stock market was just overpriced, very badly overpriced. The S&P 500 were selling at 22.3 times earnings, which is much higher in my view than it should be.

So the fact that it dropped was not shocking. It's still well above what it was at the beginning of the year, higher than it's ever been in the history of this country prior to 1987. I think it's still probably overpriced.

We are delighted to have you. I'm sure you can explain some of the technical aspects. It wasn't so much the fact that the stock market went down as it went down so suddenly, and it's been so enormously volatile—500 points in 1 day on the Dow Jones Index, a huge percentage drop, bigger I guess than we've ever had except in 1914 or so, when the situation was of course entirely different.

So we'd like to have some explanation from you on volatility, some explanation on what, if anything, the Congress should do in your best judgment, and what you think the SEC can do under the circumstances, what changes there might be.

[The complete prepared statement of Senator Proxmire follows:]

# OPENING STATEMENT

HEARING ON STOCK MARKET VOLATILITY

NOVEMBER 4, 1987

CHAIRMAN WILLIAM PROXMIRE

LET ME BEGIN BY THANKING YOU, CHAIRMAN RUDER, FOR APPEARING BEFORE THIS COMMITTEE TO DISCUSS RECENT TURBULENCE IN THE STOCK MARKET. THESE ARE VERY BUSY TIMES FOR YOU AND YOUR STAFF AND I APPRECIATE YOUR TAKING THE TIME TO SHARE YOUR VIEWS WITH US.

I WOULD ALSO LIKE TO THANK SENATOR DOMENICI FOR AGREEING TO PRESENT HIS VIEWS BEFORE THIS COMMITTEE THIS MORNING. SENATOR DOMENICI IS ONE OF THE MOST ABLE MEMBERS OF THIS BODY. HIS PERSISTENCE AND INGENUITY IN GRAPPLING WITH OUR NUMBER ONE NATIONAL ECONOMIC PROBLEM, THE FEDERAL BUDGET DEFICIT, INSPIRES MY ADMIRATION AND THE ADMIRATION OF THE AMERICAN PEOPLE. I LOOK FORWARD TO HEARING YOUR TESTIMONY.

WHAT IS THE CAUSE OF THE STOCK MARKET CRASH? THE TRADE DEFICIT, TAXES, ACRIMONY BETWEEN THE WHITE HOUSE AND THE CONGRESS, AND EXCHANGE RATE JOUSTING WITH THE GERMANS HAVE ALL BEEN LABELED THE CULPRIT BY ONE COMMENTATOR OR ANOTHER.

BUT LOOKING FOR A CAUSE BASED ON THE FUNDAMENTALS IS BOUND TO BE INSUFFICIENT. FOR SUCH EXPLANATIONS TRY TO ACCOUNT FOR AN IRRATIONAL OCCURRENCE IN RATIONAL TERMS. THE STOCK MARKET CRASH WAS THE PRODUCT OF EXCESSES, NOT SOBER

CALCULATION. IT IS THE RESULT OF THE TRIUMPH OF IRRATIONAL IMPULSES OVER SOUND AND PRUDENT JUDGEMENT.

WHEN EVENTS PROVE THAT OUR LAWS ARE INADEQUATE TO THE TASK OF PROMOTING THE SOUND AND RATIONAL WHILE RESTRAINING THE DESTRUCTIVE AND IRRATIONAL TENDENCIES OF MANKIND, WE ARE FORCED TO REEXAMINE THOSE LAWS AND CONSIDER THEIR MODIFICATION.

STUDIES OF THE STOCK MARKET CRASH OF 1929 REVEAL THAT IN THE TWO YEARS PRECEDING THE CRASH EXCESSIVE LENDING FOR SPECULATION IN SECURITIES BLEW UP A BUBBLE IN STOCK PRICES WHICH BURST ON THE AMERICAN PEOPLE.

THE CONGRESS RESPONDED, IN THE SECURITIES ACT OF 1934, BY ESTABLISHING MARGIN REQUIREMENTS ON BORROWING FOR SECURITIES PURCHASES.

MARGIN REQUIREMENTS HAVE SERVED US WELL, THEY SERVE TO DAMPEN SPECULATIVE EXCESSES AND TO PROMOTE A CLIMATE WHERE PRUDENT JUDGMENTS CAN PREVAIL.

WHERE WERE THE EXCESSES THIS TIME? IT APPEARS THAT THE EXCESSES ARE IN THE MARKET FOR SO-CALLED DERIVATIVE INSTRUMENTS; OPTIONS AND FUTURES CONTRACTS.

IN THE OPTIONS AND FUTURES MARKETS THE MARGIN REQUIREMENTS ARE ROUGHLY TEN PERCENT AND ARE SET BY THE EXCHANGES. THAT IS

MUCH LESS THAN THE 50 PERCENT MARGIN THAT THE FEDERAL RESERVE REQUIRES ON BANK LOANS FOR SECURITIES PURCHASES. IT MAY WELL BE TIME TO SUBSTANTIALLY RAISE THE MARGIN REQUIREMENTS ON DERIVATIVE INSTRUMENTS. IT MAY ALSO BE TIME TO RECONSIDER THE DECISION MAKING AUTHORITY WITH RESPECT TO MARGIN REQUIREMENTS ON DERIVATIVE INSTRUMENTS.

I AM CONCERNED BY THE CONFUSION AND INCONSISTENCIES CREATED BY THE SEPARATE REGULATION OF COMMON STOCK RELATED INSTRUMENTS. WHY SHOULD WE HAVE THE COMMODITIES FUTURES TRADING COMMISSION REGULATING STOCK INDEX FUTURES WHEN THE SECURITIES AND EXCHANGE COMMISSION REGULATES STOCK TRADING? SHOULD NOT ONE REGULATOR HAVE AUTHORITY OVER ALL STOCK RELATED FINANCIAL INSTRUMENTS?

LET ME FINALLY SAY, THAT I BELIEVE THAT ALL THE INSIDER TRADING CASES THAT HAVE BEEN BROUGHT, THE RECORD NUMBER OF JUNK-BOND FINANCED HOSTILE TAKEOVERS WE HAVE WITNESSED, THE VOLATILITY IN THE MARKETS, OUR CURRENT GO-GO, CASINO, EXCESSIVELY SPECULATIVE SOCIETY ARE ALL RELATED -- AND COMBINED THEY INEVITABLY LED TO THE CRASH OF OCTOBER 19TH.

The CHAIRMAN. Senator D'Amato.

Senator D'AMATO. Well, thank you, Mr. Chairman.

Mr. Chairman, I'm here really to listen to Chairman Ruder and I'm going to ask that my remarks, my prepared remarks, be entered into the record as if read in its entirety.

The CHAIRMAN. Without objection, so ordered.

## OPENING STATEMENT OF SENATOR D'AMATO

Senator D'AMATO. Let me simply say this, Mr. Chairman. I think it's imperative that two things take place. That is, No. 1, that we, the Congress and the administration, come together with a multiyear package and as quickly as possible to demonstrate that we're committed to doing something with the deficit.

The perception of our inability to come to grips with this, when we have a window of opportunity—that window of opportunity was the crisis that was what we saw take place. And it was a crisis. It didn't become a full-blown disaster, but certainly it was a dangerous situation.

And I'm very concerned, Mr. Chairman, that unless those of us in the Congress are willing to put aside partisan political considerations and do the business of the people and come up with a package—and it's going to mean some give and take on both sides, both on the administration and a policy that says, "No, no, no taxes, whatever the cost," and those who say that there are areas that are sacrosanct as it relates to making some budget reductions, why we're just going to have a repeat of that kind of situation with a down market and with a lack of liquidity to step in there because there's a lack of confidence.

And so, Mr. Chairman, there are some questions that I'd like to ask to Mr. Ruder as it relates to the Continental-Illinois Corp. and what's taking place as it relates to their bailing out a subsidiary that's dealing in securities.

What does he think about the margin requirements as it relates to the options—5 percent in some cases, and even less? Has that exacerbated the problem?

I commend you, Mr. Chairman, for withholding the rush to call these hearings, but for calling them now so that we can get the Chairman of the SEC to give us some of his concerns, some of his thoughts and his impressions.

[The complete prepared statement of Senator D'Amato follows:]

Alfonse M D'Amato

STATEMENT OF SENATOR ALFONSE M. D'AMATO
SENATE COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS
NOVEMBER 4, 19877

ONE OF THE MOST SEVERE FALLOUTS OF THE RECENT "CRASH", "PANIC", "CORRECTION" OR "ADJUSTMENT" IS THAT IT SEEMS TO HAVE COMPLETELY SHAKEN THE FAITH IN THE VIABILITY OF THE ECONOMY. I BELIEVE THAT TO A LARGE EXTENT PREDICTIONS OF DOOM AND DESPAIR EMANATING FROM THE WASHINGTON PURVEYORS OF THESE COMMODITIES MAY BE OUT OF SYNC WITH THE ECONOMIC REALITIES CONFRONTING CORPORATE AND POLITICAL LEADERS. WHILE SOME AMOUNT OF ANXIETY ABOUT RECENT EVENTS IN THE STOCK MARKET IS WARRANTED, I SUGGEST THAT THE MEMBERS OF THIS COMMITTEE AND THIS MORNING'S WITNESS, SEC CHAIRMAN RUDER, BE METICULOUS IN OUR CHOICE OF REMARKS UNLESS WE DESIRE TO HEIGHTEN THE CURRENT LEVELS OF ANXIETY.

SOMETIMES THERE APPEARS TO BE MORE PANIC IN WASHINGTON THAN ON WALL STREET WHEN POLICY MAKERS, WITH LITTLE AWARENESS OR UNDERSTANDING OF THE INTERPLAY BETWEEN STOCK, OPTIONS AND FUTURES MARKETS, MAKE SNAP JUDGMENTS ON THE CORRECTIVE ACTIONS WE SHOULD UNDERTAKE. THIS RUSH TO JUDGMENT WITHOUT CAREFUL ANALYSIS OF THE REASONS FOR THE MARKET'S PRECIPITOUS FALL SHOULD BE AVOIDED. POLICY BLUNDERS WILL ONLY EXACERBATE PROBLEMS IN THE MARKETPLACE.

IN A RECENT ARTICLE, ROBERT SAMUELSON ARTICULATES MY WORST FEARS OF THE COST OF HASTY AND INCORRECT GOVERNMENT RESPONSES.

"WHAT CAUSED THE GREAT DEPRESSION WERE GOVERNMENT BLUNDERS. THE FEDERAL RESERVE DIDN'T PROTECT THE BANKING SYSTEM. BETWEEN 1929 AND 1933, TWO-FIFTHS OF THE NATION'S 25,000 BANKS BAILED. CONSUMER DEPOSITS WERE FROZEN OR WIPED OUT. BUSINESS LOANS WERE CALLED. A DOWNWARD SPIRAL ENSUED. AS CREDIT CONTRACTED, BANKRUPTCIES AND UNEMPLOYMENT ROSE. NERVOUS BANK DEPOSITORS WITHDREW THEIR MONEY, SQUEEZING LOANS FURTHER. THE FEDERAL RESERVE DIDN'T STOP THIS SPIRAL BY PROVIDING BANKS WITH LOANS TO MEET CUSTOMERS' DEMANDS FOR CASH."

DUE TO A VARIETY OF ECONOMIC REASONS AND REGULATORY SAFETY NETS, THE SITUATION CONFRONTING US TODAY DOES NOT PORTEND THE TRAGIC CONSEQUENCES DESCRIBED BY MR. SAMUELSON THAT FOLLOWED THE CRASH OF OCTOBER 1929. WHAT WE MUST WORK TO AVOID IN THE TYPE OF ECONOMIC STAGNATION AND POLITICAL STALEMATE THAT LED TO THE GREAT DEPRESSION. AS MY COLLEAGUE FROM COLORADO, BILL ARMSTRONG, STATED ON THE FLOOR OF THE SENATE LAST WEEK, WE MUST LEARN FROM THE PAST RATHER THAN PERSIST IN MAKING THE SAME MISTAKES. WE MUST EXAMINE THE IMPLICATIONS OF THE ENACTMENT OF MISGUIDED LEGISLATION SUCH AS UNNECESSARY TAX INCREASES AND PROTECTIONIST LEGISLATION. RESTRICTIVE REGULATION AND HEAVY TAXES THAT SUFFOCATE GROWTH ARE NOT THE ANSWERS.

WHAT WE SHOULD DO THIS MORNING IS EXAMINE THE STEPS, IF ANY, THAT SHOULD BE TAKEN TO REDUCE THE VOLATILITY OF THE STOCK MARKET WITHOUT UNDULY INTERFERING WITH ITS DAY TO DAY OPERATIONS. IN DOING THIS, WE SHOULD BE MINDFUL THAT SPECULATION ABOUT OR THE ASSIGNMENT OF BLAME FOR THE REASONS FOR THE MARKET'S DROP ARE USELESS. IT IS WITHIN OUR JURISDICTION TO EXAMINE THE REGULATORY SYSTEM WHICH HAS DEVELOPED OVER THE LAST 50 YEARS AND

IDENTIFY ITS STRENGTHS AND WEAKNESSES. WHILE UNDERTAKING THIS EXERCISE, WE MUST REALIZE THAT "WE ARE NO LONGER THE ONLY GAME IN TOWN." IF RECENT EVENTS HAVE TAUGHT US ANYTHING, THEN IT IS THE FACT THAT A SYMBIOTIC RELATIONSHIP EXISTS BETWEEN OUR DEBT AND EQUITY MARKETS AND EUROPEAN AND ASIAN DEBT AND EQUITY MARKETS. REFORMS IN THIS COUNTRY ARE OF LITTLE USE WITHOUT INTERNATIONAL COOPERATION.

I DO NOT EXPECT AN ECONOMIC COLLAPSE WILL BE THE LEGACY OF THE MARKETS RECENT DROP. HOWEVER, A FAILURE TO TAKE APPROPRIATE ACTIONS OR THE IMPLEMENTATION OF WRONG HEADED POLICIES MIGHT BE ENOUGH TO SHOVE US INTO THE ECONOMIC ABYSS WE SO FEAR. WE SHOULD AVOID THESE DUAL TEMPTATIONS.

The CHAIRMAN. Thank you, Senator D'Amato.

Senator Riegle.

Senator RIEGLE. Thank you, Mr. Chairman. Let me thank you for convening this hearing today, some time now after the market collapse, to have a chance to engage in a measured discussion with the Chairman of the SEC.

And let me ask first that my full statement be made a part of the record.

The CHAIRMAN. Without objection.

## OPENING STATEMENT OF SENATOR RIEGLE

Senator RIEGLE. And let me say to you, Chairman Ruder, that I appreciate the care with which you've prepared your testimony today. I think your prepared statement is one of the best that I've seen in a long time here in the Senate. And it comes not a long period of time after all this difficulty has struck the market.

I also appreciate the time that you and your staff members have given to me as Chairman of the Securities Subcommittee, as we have spent some interesting hours together over this last several days.

I think what we need to hear from you today, so that we can understand as best we can just what caused the market break—is what seemed to be the key factors, and what, if anything, in the internal mechanics of the financial markets themselves may have helped bring this about, or made it worse than it otherwise might have been.

I think when we get a worldwide market collapse of this sort that it has tremendous implications, I think very dangerous implications for the economic future, certainly for our country, but for every other country as well.

As you know, I have sent you a letter requesting that the Commission reconstruct exactly what took place leading up to the events of "Black Monday", on that day and the days immediately following.

And I trust that work is now underway to try to fully lay out exactly what took place, and what may have been some of the driving factors that were at work to take the market down over 500 points, as Senator Proxmire says, or to lose 22 percent of its value in a single day.

So I look forward to going over with you in the subcommittee in some careful detail exactly what that reconstruction shows us.

I have made three recommendations and I would hope that you'd comment on them today.

One is that we create an International Securities Regulatory Commission to begin to better regulate and coordinate international securities markets. Clearly, we are in a 24-hour a day trading market system now, and I think we need to understand the relationships between these markets and tie them together.

I've also suggested the creation of a new independent special advisory committee to study the securities markets similar to the special study that was conducted so successfully in 1963.

And then also—and I know you have a strong feeling about this—suggested an immediate increase in the funding and the staff levels for the Division of Market Regulation and Investment Management and to make sure that we establish an exemption for the Commission from the budget cuts that are now posed by Gramm-Rudman.

This is no time to be cutting back on the capability of the SEC. In fact, I think we're still significantly understaffed and that's a longstanding problem. It goes back over several years under the previous chairman, and which we've discussed at great length here in this committee.

I've also heard reports, and let me stress now that they are only rumors and so I want to find out precisely what the facts are, that during the events of recent weeks, certain firms may have sold for their own accounts before executing individual orders.

I want to find out if that is so, and while that kind of selling may be perfectly legal, I am concerned about whether or not individual shareholders, the small shareholder may have been shouldered out of the way in some situations by major holders of securities, including firms that may have moved ahead in order to look after their own interests rather than those of the small shareholder.

I'm very much concerned about that.

Let me now turn to something that was developed here in May of this year, when John Shad, your predecessor, had his final hearing before this committee. He served longer, as you know, in your job than any previous SEC Chairman.

And I asked John Shad on May 13 of this year this question:

> Some have argued that, given the number of market devices that are now being used for portfolio insurance and indexes of various kinds, that you might see the market in a given day not go up or down 150 or 200 points, but maybe 500 points.

Is it also beyond the realm of realistic possibility in your view, or should we steel ourselves to the fact that we are now into a new condition with a different kind of market, with lots of new instruments, and the prospect of that kind of thing could be real?

And Chairman Shad's response, which is of course in the record, was as follows:

> In terms of the probabilities of a 1-day break of 500 points on the Dow Jones average, I would say that it's highly remote—very remote.

I also asked him:

> About the possibility of a market meltdown.

His response was:

> I think there are an awful lot of reasons why that is highly, highly improbable. As for the meltdown theory, I just don't think it's likely.

And then, when you were here for your own confirmation hearing, we discussed these same issues. I asked the following:

> Did you see any risk that as a result of some of these new trading techniques we might some day soon be headed toward a market meltdown?

And at that time, you responded:

> Excessive market speculation combined with new trading techniques may yield market volatility. But I have not seen convincing evidence that a, quote, "market meltdown", presumably a market trading-induced dramatic fall in market prices is imminent.

Well, we've all had a chance now to learn from history, in a sense, and we have found that we were much closer to that condition than any of us would have liked.

And so I hope today in your elaboration on this very finely prepared written statement that you will be as candid and as direct with us here as you have been in our private discussions, because I think we need to lay the facts on the table, decide what actions may be needed, and then step forward to take them.

[The complete prepared statement of Senator Riegle follows:]

## Opening Statement of Senator Donald W. Riegle, Jr

## November 5, 1987

## Oversight Hearing on Recent Securities Markets Developments

Mr. Chairman, at the outset I want to thank Mr. Ruder for appearing before us today at this busy time to share with us his views on the recent stock market volatility. I have met with Chairman Ruder personally during these past three weeks and I appreciate his efforts to ensure that Congress remains fully informed regarding conditions in the markets.

A primary purpose of this hearing must be to determine what steps, if any, should be taken to prevent, or at least minimize, similar worldwide market collapses in the future. Many people argue that a correction of some sort or another was inevitable, but the global hysteria surrounding Black Monday was irrational.

I have recommended, and look forward to Chairman Ruder's thoughts on the following 3 subjects:

1. The creation of an International Securities Regulatory Commission to better regulate and coordinate international securities markets to help avoid future panics.
2. The creation of a new independent Special Advisory Committee to Study the Securities Markets similar to the Special Study that was conducted so successfully in 1963. And
3. An immediate increase in the funding and staff levels for the Division of Market Regulation and Investment

Management and an exemption for the Commission from the budget cuts posed by Gramm-Rudman.

I have also heard reports -- and let me stress that at this time they are only rumors -- that during the events of recent weeks certain firms sold for their own accounts before executing individual orders. While such selling may be perfectly legal, I look forward to Chairman Ruder's views on whether the Commission is looking into these reports and what, if anything, should be done to protect the individual shareholder in such a situation.

It seems increasingly clear that we will only fully understand the ramifications of the recent market drop with the passage of time. However, among other things, we do know that approximately $1 trillion dollars of wealth was lost in a period of approximately a month. We also might assume that the damage suffered by individual investors whipsawed in this unprecedented volatility may chill grass-roots participation in our securities market in the future.

In any event, one overall theme that seems to be emerging from the financial community is that Monday October 19 was the "end of business as usual" in the financial markets. To the extent that this is an accurate prophecy, I am concerned with what may lie ahead, and what was responsible for the end.

The public also wants to know:

-- What steps are currently being taken by the regulators to minimize the chances of an October 19 replay?

-- Whether recent experience calls for any permanent changes in the operations, regulation, or structure of the individual exchanges or in the relationships between different exchanges?

-- The extent to which the volatility of our markets is now tied to swings in foreign markets? And

-- What triggered the momentous decline in a single day rather than over a period of time?

Finally, Chairman Ruder, I believe the Commission would be well advised to establish a Contingency Planning Unit at the SEC.

Earlier this year I asked your predecessor, John Shad, the following question at our May 13, 1987 Securities Subcommittee SEC Authorization hearing:

> "Some have argued that given the number of market devices that are now being used for portfolio insurance and indexes of various kinds . . . you might see the market in a given day not go up or down 150 or 200 points but maybe 500 points. Is that also beyond the realm of realistic possibility in your view, or should we steel ourselves to the fact that we are into a new condition with a different kind of market, with lots of new instruments, and that the prospect of that kind of thing could be real?"

Chairman Shad's response was "In terms of probabilities of a 1-day break of 500 points of the Dow-Jones average? I would say I think it's highly remote, very remote."

I also asked Mr. Shad, "about the possibility of a market meltdown." His response: "I think that there are an awful lot of reasons why that is highly, highly improbable. As for the meltdown theory, I just don't think its likely."

And you, yourself, Chairman Ruder, while specifically recognizing at your confirmation hearings the need for "Development of initiatives to meet program trading problems" responded to my question: "Do you see any risk that as a result of some of these new trading techniques we might someday soon be headed toward a market meltdown?" as follows. You said:

> "Excessive market speculation combined with new trading techniques may yield market volatility, but I have not yet seen convincing evidence that a 'market meltdown' (presumably a program trading induced dramatic fall in market prices) is imminent."

So clearly we need a more realistic planning capability at the Commission.

It is also a disturbing commentary on the planning capacity of the Commission over the past six years, prior to the arrival of the new Chairman, that is has taken an historic scandal in the securities industry for the Commission and the Administration to recognize the need for, and request, additional funding for the Division of Enforcement -- and the budget for the Division of Market Regulation and Investment Management still remains essentially frozen. This is in spite of the fact that the SEC is a self-funding agency that returns an approximately 200% profit to the Treasury. All these facts were clearly spelled out in the Committee's recent SEC Authorization Report.

But these last remarks are directed prior to the Ruder Administration. I have every confidence that our new SEC Chairman -- having weathered his recent baptism under fire -- will bring the necessary leadership and take whatever steps are required to plan responsibly for the future.

This morning I look forward to Chairman Ruder's testimony and views on on the events surrounding October 19th. Now is the time to perform the autopsy and get to the facts before we reach any conclusions.

The CHAIRMAN. Thank you, Senator Riegle.

Senator Heinz.

### OPENING STATEMENT OF SENATOR HEINZ

Senator HEINZ. Mr. Chairman, thank you.

Mr. Chairman, I think we all agreed that what happened on October 19 is serious. We may or may not all agree on why it's serious. It's not just that people on Wall Street lost money. America lost. Pension funds lost.

Many of us spent a lot of time trying to build up pension funds, so that people had something besides social security on which to depend on.

The consumers lost because confidence in the market dropped. The small investor lost in the market. Businesses lost the ability to go to market and finance; the cost of capital for equity financing is 30 to 50 percent higher today than it was 3½ weeks ago.

So, America lost, and lost in a big way.

My second concern is that we may have not seen anything yet. I say that for two reasons. First, we haven't seen, at least as of today, any evidence that we can govern. The market sent us a message on October 19. That message was to get our fiscal house in order. Unfortunately the housekeeping to date shows that everybody is out to lunch. Nobody is picking up the mess. Nobody is hauling the trash. No one has attended to the deficit.

Maybe that's why the market sent us the signal yesterday.

Second, I think we ought to take careful note that there is the possibility of a recession, and what that means for the future of all those people I mentioned—the consumer, the investor, the pensioner, the business man who needs equity capital.

On Monday, October 19, the Standard and Poor's 500 stood at 225, or about 11 times estimated fiscal 1988 earnings with a multiple estimated then by analysts at approximately $20 a share.

That's where it stood on October 19. A recession estimate of earnings is $17 a share, and a recession multiple is more like $9. Multiply 9 times 17 and you get a very low number. You get an S&P 500 number of around 153.

Now, yesterday, the S&P 500 was about 250. What kind of a drop is from 250 to 153? How much is that? The answer is about 30 or 40 percent. The answer is it's not a 508 point drop, it's about a 608 point further drop.

Now, that's what happens if the market goes into a recession psychology. I don't say there's a recession yet. I say that's what happens if we go into a recession psychology.

Now, we didn't have a recession psychology on October 19. We had some fears about inflation. We had some fears about the dollar. But the fears about inflation were ill-founded because commodity prices have been coming down. By the way, they're down a lot since then, too.

What happened was an intersection of technology with new products—the technology being such things as direct order transfer program trading, the new products being the stock index futures contracts traded on the Chicago Mercantile—and we saw extensive volatility.

The question obviously is, If we could have a 508 point drop in the market which was not warranted by the fundamentals, given all of that technology, what would we have if the fundamentals did warrant a drop in the market?

I don't know the answer to that, Mr. Chairman. I sure hope we don't have to find out because another 500 or 600 point drop in the market would guarantee that we would go into a hair-raising recession for two reasons. First of all, people would have decided we're in it; and, second, that kind of a drop would take us back to about 1980.

It would wrongfully tell people, but it would still tell people, that everything we've worked for during the last 6 or 7 years had disappeared—gone away. Lots of pain—7 years—and no gain.

The question that I think we need to address today, among others, and Don Riegle has posed a lot of good questions, as has Al D'Amato and others, is, as we sit here, program trading, at least for nonproprietary accounts has been turned back on.

The computer programs are on this morning. Direct order transfer is on this morning. It was off up until 9:30 a.m. And I'd like to know whether the SEC thinks that we ought to leave it on, particularly with the risk that may be involved.

Those are some of the questions, Mr. Chairman, I think we need to get to. And I think we need to get to them fast.

The CHAIRMAN. Mr. Shelby.

## OPENING STATEMENT OF SENATOR SHELBY

Senator SHELBY. Thank you, Mr. Chairman.

Chairman Ruder, I, too, want to welcome you back to the Banking hearing. We thought, when we were having your confirmation hearings earlier, you wouldn't be back so soon, or under these circumstances. But we do welcome you.

And, Mr. Chairman, I want to commend you for calling this hearing. And I welcome the opportunity to have an economic expert such as Chairman Ruder here to tell us what exactly occurred in the capital markets.

The media, as most of us know, has many explanations. One, the budget deficit—$160 billion in this year alone. This prosperity, as most of us know, has been purchased on credit. Last year, we had a $220 billion deficit, yet we had a bull market. Equally troubling is the trade deficit. We've got to close the gap between exports and imports. We've got to regain again our competitive edge.

However, I don't believe that the Government's entirely responsible. Let's look at Wall Street. Some of its inventions, made possible by computers have come under fire.

We've got program trading. Some people have chosen this for a scapegoat. Portfolio insurance, index arbitrage, are they really responsible here? Computers trade large blocks of stock in seconds. The New York Stock Exchange pulled the plug on program trading; many of my constituents would like the computers unplugged for good.

But can we do this in this age of technology and global markets?

Overinflated stock prices are symptomatic of a market built on optimism. Many experts predicted the market was due a correction, yet few forecasted so severe a drop. In my opinion, the Dow attained such heights based on greed and it plummeted due to fear.

Washington can help eliminate some of the fear but it's going to take Wall Street to eliminate a lot of the greed.

I recently signed Senator Conrad's letter saying to the people that are representing us in negotiations with the House and the White House on budget deficit reduction, that $23 billion in budget cuts is not enough. We've got to go further because we're already hearing in the marketplace that it's got to be a much higher number—$50 billion, perhaps even more.

I look forward, Chairman Ruder, to your insight here today on what we in Washington must do and what you on Wall Street must do to stabilize this economy. We need to start by stabilizing this market.

Mr. Chairman, I ask that my written statement be made a part of the record.

The CHAIRMAN. Without objection, it will be printed in full.

[The complete prepared statement of Senator Shelby follows:]

## STATEMENT BY SENATOR RICHARD SHELBY
NOVEMBER 4, 1987

MR. CHAIRMAN, I COMMEND YOUR LEADERSHIP FOR SCHEDULING THIS HEARING. I WELCOME THE OPPORTUNITY TO HEAR FROM THE ECONOMIC EXPERTS EXACTLY WHAT HAS OCCURRED IN THE CAPITAL MARKETS RECENTLY.

THE MEDIA HAS MANY EXPLANATIONS, MANY OF WHICH ARE ACCUSATIONS TOWARDS US HERE IN WASHINGTON, AT WHAT CAUSED THE STOCK MARKET'S VOLATILITY:

1) **MOST BLAME THE BUDGET DEFICIT**- WE CAN EXPECT A DEFICIT OF AROUND **$160 BILLION** IN THIS YEAR ALONE.

PROSPERITY OF LAST FIVE YEARS
WAS PURCHASED ON CREDIT. MARKET CRASH
INDICATES THAT NOW WE MUST PAY FOR THE
ECONOMIC GROWTH AND EXPANSION WE HAVE ENJOYED.

HOWEVER, DEFICIT HAS BEEN LARGER -
**220 BILLION DOLLAR DEFICIT LAST YEAR**
AND YET STOCK MARKET WAS STILL A BULL MARKET

2) TRADE DEFICIT - EQUALLY OMINOUS

MUST CLOSE THAT GAP BETWEEN EXPORTS AND IMPORTS

HOWEVER, THE GOVERNMENT IS NOT ENTIRELY RESPONSIBLE FOR THE MARKET'S VOLATILITY

WALL STREET'S INVENTIONS, MADE POSSIBLE BY COMPUTERS, HAVE COME UNDER FIRE

1) PROGRAM TRADING HAS EMERGED AS A POPULAR SCAPEGOAT.

SOME MAINTAIN THAT THE TECHNIQUES INVOLVED WITH PROGRAM TRADING, SUCH AS PORTFOLIO INSURANCE AND INDEX ARBITRAGE, ARE RESPONSIBLE FOR THE EXTREME VOLATILITY THAT THE MARKETS HAVE SUFFERED.

COMPUTERS OFFER THE CAPACITY TO TRADE LARGE BLOCKS OF STOCK IN MERE SECONDS. THE NEW YORK STOCK EXCHANGE CHOSE TO LIMIT THIS TECHNIQUE'S IMPACT ON THE MARKET BY UNPLUGGING THE MACHINES. THERE ARE MANY WHO WOULD LIKE TO SEE CONGRESS MANDATE THAT THESE COMPUTERS BE UNPLUGGED FOR GOOD.

2) AND FINALLY, ANALYSTS HAVE BEEN WARNING FOR QUITE SOME TIME THAT **STOCK PRICES HAVE BEEN WAY OUT OF LINE** WITH PRICE-EARNINGS RATIOS AND GENERAL ECONOMIC EXPECTATIONS.

A DOW JONES INDUSTRIAL AVERAGE NEARING 3000 REPRESENTED UNREALISTIC, INFLATED STOCK PRICES, A **MARKET BUILT ON OPTIMISM RATHER THAN AN ACCURATE ESTIMATION OF CORPORATE EARNINGS.** THE MARKET WAS DUE A CORRECTION.

I BELIEVE THAT THE STOCK MARKET TUMBLED FOR A COMBINATION OF THESE REASONS.

WE HAVE HEARD THE WORDS GREED AND FEAR MENTIONED QUITE FREQUENTLY IN THE PAST TWO WEEKS. THE DOW REACHED ITS HEIGHTS AS A RESULT OF GREED AND IT PLUMMETED THAT RAPIDLY BECAUSE OF FEAR. ON OCTOBER 19 FEAR FED UPON ITSELF AS LARGE SELL ORDERS LOWERED PRICES AND ENCOURAGED YET MORE SELLING. BUT THE FEAR THAT TRIGGERED THE FALL WAS APPREHENSION THAT THE UNITED STATES LACKED THE DISCIPLINE TO LIMIT CONSUMPTION AND THE INTEGRITY TO RETURN TO FISCAL RESPONSIBLITY. I BELIEVE THAT WE IN WASHINGTON HAVE OUR WORK CUT OUT FOR US IN ELIMINATING THE FEAR. WALL STREET MUST CONSIDER THE CONSEQUENCES OF GREED.

I JOINED WITH I IMAGINE MOST OF MY COLLEAGUES IN THIS ROOM IN SIGNING SENATOR CONRAD'S LETTER DIRECTING THE SENATE NEGOTIATING TEAM TO PUSH THE ADMINISTRATION FOR MORE THAN $23 BILLION IN BUDGET DEFICIT REDUCTIONS. WE MUST SEND A STRONG SIGNAL TO THE GLOBAL ECONOMY BY REDUCING NEXT YEAR'S BUDGET DEFICIT BY AT LEAST $50 BILLION DOLLARS.

I LOOK FORWARD TO YOUR INSIGHT ON THE CAUSES OF THE CRASH AND TO YOUR RECOMMENDATIONS ON WHAT WE, IN WASHINGTON, AND YOU, ON WALL STREET, CAN DO TO STABILIZE AND PROTECT THE ECONOMY FROM FUTURE DECLINE.

The CHAIRMAN. Senator Hecht.

## OPENING STATEMENT OF SENATOR HECHT

Senator HECHT. Thank you, Mr. Chairman.

I also welcome you, Mr. Ruder, and I think that during the past 2 weeks, you've done a great job. I think John Phelan from the New York Stock Exchange has done a great job. Every buy order was executed. Every sell order was executed. And to bring gentlemen like yourself up and say what happened, you know, Congress is one of the greatest buckpassers I've ever seen in my life.

I was in the business world for 35 years, only in the Senate for 5 years. But, since I've been here, we have an utter disregard for cutting the spending. Every spending bill right now is going up, but what no one talks about in Congress is what is in the horizon mandated health benefits, parental leave, plant closing, minimum wages, all against the business people who do all the employment.

Obviously, Congress cannot balance a budget and what do they want to do? They want to raise taxes, which is counterproductive. And on top of that, a trade bill, which in a lot of our feelings caused the last Great Depression.

So all I say to you is continue to do the job. I think we should stand back and reflect, wait and hear from you before we rush into any type of legislation and give you time to digest what happened. But, at the same time, we'd better start sharing a lot of that responsibility ourselves.

Thank you.

The CHAIRMAN. Senator Sasser.

## OPENING STATEMENT OF SENATOR SASSER

Senator SASSER. Thank you, Mr. Chairman.

Mr. Chairman, the question that I've heard time and time again over the past 2 weeks is—in fact, I've asked myself that same question—is why did the stock market crash?

We've heard various answers to that question, among them Secretary Baker's purportedly ill-timed comments regarding the interest rates charged by the Germans. Some say our action in the Persian Gulf. Others say the Fed's increase of the discount rate and the tight money policies that appeared to be in the offing.

Some say it's the budget and trade deficits, although they've been around now for about 7 years, or longer.

And of course there's program trading, and even one respected—well, I won't say respected, but one columnist advanced the thesis that the rejection of Judge Bork is really what caused the market to crash.

And I'm reminded that Secretary Weinberger says that the Defense cuts are what caused the market to plummet.

But, I think when all is said and done, Forbe's magazine had it right. They wrote this week that the better question to ask is:

How did stock prices get so inflated in the first place?

And for Forbes's, the answer is only too obvious. They say that prices on the market simply got out of touch with reality.

In August of this year, stocks were trading at a ratio of 22 times earnings, in contrast to the norm of 15 times earnings. What our former colleague and distinguished investment banker, Nick Brady, terms an overvaluation, indeed, a worldwide overvaluation of equities, had developed.

According to Brady, rampant takeovers, restructuring and stock buyouts financed with borrowed money were a major factor in the dramatic rise in stock prices.

Wall Street, I think, developed a casino atmosphere, a reputation as a place to get rich quick. It's been marked by excesses, the largest insider trading scandal in history. Twenty-five year old people making 6-digit salaries and bragging about their role in restructuring corporate America.

A market in stock futures that was growing to rival the size of the stock market itself.

Mr. Chairman, the warning signs of this collapse and the ensuing volatility were out there for a good while. Certainly, our fundamental economic problems, such as the twin deficits, that of the budget/trade deficit had been with us for a good while.

And for over 2 years, John Phelan of the New York Stock Exchange and others had warned us of excessive speculation, he said: "The markets are leveraged to the teeth."

What's been the response of the Government to this warning?

This administration has espoused a, quote, "efficient market" theory. In other words, the stock market works best when it regulates itself, a hands off policy.

Somehow, we seem to have forgotten about 1929. In effect, it was a green light for a nation that Business Week calls, "Excessively devoted to high stakes financial manuevering as a short-cut to wealth."

What Business Week called, quote, "a casino society" over 2 years ago.

I think this hands off policy had an impact. At a time of enormous increase in the volume and complexity of the markets, the Securities and Exchange Commission was left enormously underfunded. Indeed, the General Accounting Office has been sharply critical for some time of the Securities and Exchange Commission's underfunding and lack of staffing.

The General Accounting Office has criticized the Securities and Exchange Commission's excessive reliance on so-called "self-regulatory organizations" to regulate the market. And the SEC's resultant lack of oversight of these organizations.

Frankly, as I've expressed in the past to you, Mr. Chairman, both publicly and privately, I'm concerned about the laissez faire orientation of many of the key securities regulators appointed by this administration.

This hands off attitude at a time of extreme volatility, speculation and complexity attributed I think to the overheating of this market. The market pushed itself to greater and greater heights, to a point of unreality, where a precipitous and I think disastrous fall was inevitable.

The markets on balance I believe perform well, considering the enormity of the crash. But I think we need to look long and hard at the policies that got us to this point.

And let's not kid ourselves. This fall ruined many small investors. I think, as we peel this thing back, we're going to find that the big investors got out early Monday. It was the small investors who rode that market down until late on the afternoon on "Black Monday".

This fall may have irreparably damaged business and consumer confidence in this economy. Only time will tell about that.

But I think, Mr. Chairman, it's our duty on the Banking Committee to make sure that we have a regulatory framework in place that will prevent another damaging fall. It's our task to do this job with or without the help of this administration, and to try to help calm the markets and begin the process of restoring confidence in the economy.

Mr. Chairman, I thank you.

The **CHAIRMAN**. Thank you, Senator Sasser.

Senator Gramm.

## OPENING STATEMENT OF SENATOR GRAMM

Senator **GRAMM**. Well, Mr. Chairman, thank you.

Mr. Ruder, I welcome you before the committee. There is good news, I'd like to say. First of all, I hadn't heard anybody cuss Gramm-Rudman since the stock market collapsed. [Laughter.]

And I think it proves the old adage: "It's a foul breeze that doesn't blow any good."

Second, it's as if a great evangelist has come to Washington and saved many souls and there are many born again fiscal conservatives.

Now we'll get a test as to how much backsliding there's going to be when we finally quit talking about all we're going to do and the negotiators come up with a real program and we ask for the yeas and the nays.

My theory is a simple one as to what happened. And that is, after 2 years of progress in reducing the deficit, in reducing the size of the Federal Government relative to the private sector, we had a fundamental change in expectations in the marketplace.

People really believed beginning in December 1985 that for the first time in a quarter of a century that we were going to do something about the deficit and about explosive growth in the Federal Government.

Beginning in January and February of this year, spending took off. The projected rate of growth, unless we do something in the name of this new-found fiscal responsibility, the projected rate of growth in Federal spending this year will be almost three times the rate of growth last year.

I think that combination of increase in spending and the deficit, the fact that the Federal Reserve Bank clearly took its foot off the gas in January and February and applied it gently to the brake, the monetary base growing this year less than half of what it grew last year, and the fundamental reordering of expectations of investors as they looked at 2 years on which they had projected that success into the future saw the current failure—I think a combination of all those things produced the high interest rates that produced the underlying problem.

I, frankly, am amazed at all the talk about program trading. If, by eliminating the use of the computer, you can make stock prices high, I suggest you go on and outlaw the calculator and ultimately the pencil. If you could simply have people chisel these records on rocks. [Laughter.] And that would somehow make values higher, or outlaw written communications altogether, just have people do it all verbally and have it committed to memory.

I think it shows the kind of quackery and nonsense where we're blaming the technology of exchange for the problem which we have fundamentally created.

Finally, this whole idea of laissez faire and free enterprise is obviously a passing fad. We would have never had the collapse in the stock market without it. Of course, we never would have had any real equity value without it either.

But I go back to remake my point, Mr. Chairman, and I'll yield the floor. I think there is something that Congress can do about this problem. And I think what we need to do is get back to the policy that for 2 years saw equity values grow, a policy that has created an economic recovery with 13.5 million people who have gone to work in permanent, productive, taxpaying jobs. I think that policy changed in January.

I think it's reflected in the current deficit numbers. And I think that's the one thing that we can do that will really address this problem.

The CHAIRMAN. Thank you, Senator Gramm.

Senator Sanford.

## OPENING STATEMENT OF SENATOR SANFORD

Senator SANFORD. Thank you, Mr. Chairman.

I certainly share the tremendous concern expressed by my colleagues about what has happened in the stock market, and the financial markets of not only this country, but of the world. I am pleased that Senator Riegle is talking about looking at the entire range of financial markets. This market volatility that we've seen may very well have fundamentally changed our financial markets. Or, more likely make us aware of the fact that they've been changed gradually now over a period of years, and we haven't paid very much attention.

There's no question that Congress needs to examine the causes of the market's steep decline. But I think less obvious, and I was glad that Mr. Sasser raised this point, that we need to ask ourselves why it climbed to such overvalued prices in the first place.

A great many people were worried about escalating stock prices before the market fell. And whatever the causes and whatever toppled it, the major reason that the market fell is that stocks were grossly overpriced.

In your testimony, for example, you talk about PE ratios being up to 20 from 10. Clearly, the speculators had taken over. While of course we need to tackle our enormous and unacceptable budget deficit, given the overinflation of the market, I don't think that we can say that the budget deficit alone has caused the market difficulties. I don't think that the market just sends us a message.

Rather, Congress ought to also be sending the market a message. There's no question that unrestrained and, more to the point, unrestricted trading has been the major cause of the overvaluation of the market and hence, its subsequent collapse.

Now, there are dozens and dozens of things that ought to be attended to to deal with this volatility and overvaluation in the market. I'd quote John Phelan, the Chairman of the New York Stock Exchange, who recently said:

> One of the reasons for the volatility, tremendous volatility, is a large amount of capital created during the earlier years of inflation that's not been converted into tangible assets, but instead has been used in this wave of takeovers and buyouts.

And that's a point that I'm sure you, Mr. Ruder, and I have disagreed on. Not only this point, but another one that ought to have been obvious to us all along was made last August—not after the collapse, but last August before the crash. Elliott Janeway made this point as he told people to stay out of the stock market. His reason was his concern that we had allowed regulation to get out of hand or to be neglected, and we had allowed all kinds of new devices that were aimed more at speculation than at providing capital for the industry and the economy of the country.

I quote him:

> The stock market inflation has its roots in 1976, when the Commodity Futures Trading Commission was persuaded to rule that securities futures contracts are commodities.

Janeway goes on to claim that permitting the purchase of futures at margins below 10 percent, the margin allowed for purchases in 1929, has permitted "the lure of racy, thin margins on which to trade stock and bond futures."

I certainly appreciate your diligence and your conscientious approach in dealing with the difficulties of this volatile market, but I can't help but take this occasion when we are talking about restoring confidence in the markets to note the concern expressed in the Wall Street Journal yesterday about the possibility that you lack the toughness needed to bring order to a reeling securities market.

Let me say I urge you and all of us to find that toughness. I hope we can find ways across-the-board, and not only by balancing the budget, to restore the confidence that makes the securities markets a reliable source of money for the corporate and industrial enterprise of America.

The market has gotten out of hand. I think the speculators have taken over. I think the investors ought to get it back. And together we ought to help them.

Thank you.

The **CHAIRMAN**. Senator Graham.

Senator **GRAHAM**. Thank you very much, Mr. Chairman.

I would like to ask permission to insert for the record my full statement of my remarks, which include positive statements for Chairman Ruder and the very difficult task which he has before him.

The **CHAIRMAN**. Without objection, so ordered.

## OPENING STATEMENT OF SENATOR GRAHAM

Senator **GRAHAM**. I would like to respond and comment on some remarks made by my namesake, the Senator from Texas——

Senator **GRAMM**. Don't ruin our good name. [Laughter.]

Senator **GRAHAM**. Well, I am attempting to restore our good name. [Laughter.]

And particularly to comment to the fact that my spelling of the name is Scotch. And I think that one of the things that our nationality is known for is the production of good economists.

And one of the aspects of that heritage of good economists is an understanding of human nature. And that society has a responsibility to provide appropriate constraints for the avaricious character which is inherent in the human animal.

I believe that one of the issues that we have to appreciate in this current situation is that we have moved into a fundamentally different era. And the most significant aspect of that change has been the globalization of the economy in which we operate.

And, therefore, while there is certainly blame to be focused within the United States and on this Capitol City and those of us who occupy it, we must understand that many of our basic economic motivations are now outside of our own sovereign control.

This, to me, requires a new role for sovereign governments, because we are increasingly dealing in what are essentially political economic decisions relating to the relationships across national boundaries.

When the fact that Europeans and Japanese decide to restrain their previous level of buying of our Treasury notes causes a sharp uptick in the interest rates on long-term Treasury indebtedness and that sends a chill through the marketplace is an indication of how quickly decisions made outside the United States can affect our own stability and well-being.

And, second, as to the return to either a nonverbal society or one which relies on chipping on marble, a concern for aviation safety does not require us to expunge the names of the Wright Brothers from our history. And a concern for the fact that technology has caused the ability to convert our markets, which are intended to serve as efficient means of raising and distributing capital into the categorization which I think Senator Sasser appropriately gave it, a casino, is a real problem.

There may be some socially redemptive value to having people deal in options futures on a nonexistent number which represents the aggregate value of Standard and Poor's stocks.

What that social redemptive value is is not clear to me and the case has not been made. Technology has allowed us to convert a capital's market into a daily, 24-hour, worldwide traded casino.

I don't think that that is in the interest of our economy, and I believe that is the type of reform to which our regulatory agencies should address immediate attention.

I look forward to hearing your remarks and the interplay between members of this committee, an interplay which I would anticipate will have many chapters to be written in the future.

[The complete prepared statement of Senator Graham follows:]

OPENING REMARKS - BANKING COMMITTEE - 11/4/87

THANK YOU, MR. CHAIRMAN...

IT IS A PLEASURE TO HAVE CHAIRMAN RUDER OF THE SECURITIES AND EXCHANGE COMMISSION WITH US TODAY.

CHAIRMAN RUDER - I CONGRATULATE YOU ON YOUR HANDLING OF THE OCTOBER STOCK MARKET CRISIS. YOU AND YOUR COLLEAGUES IN NEW YORK AND CHICAGO KEPT THE MARKETS OPERATING AND MAINTAINED THE INTEGRITY OF THE MARKETPLACE DURING A VOLATILE AND CONFUSING TIME.

THE FACT THAT TRADING COULD CONTINUE, THE FACT THAT INDIVIDUALS AND CORPORATIONS COULD INITIATE AND COMPLETE TRANSACTIONS - ALL CONTRIBUTED TO A BASIC SENSE OF CONFIDENCE IN THE MARKET'S ABILITY TO STABILIZE ITSELF.

I LOOK FORWARD TO HEARING YOUR INSIGHTFUL COMMENTS REGARDING THE EVENTS OF OCTOBER 19 AND THEIR AFTERMATH. THE MERCURIAL NATURE OF THE MARKETS SINCE THE 19TH HAS AFFECTED AMERICANS' SPENDING AND SAVING DECISIONS. ANSWERS TO HOW AND WHY OCTOBER 19TH HAPPENED WILL HAVE TO BE FOUND.

WE CAN POINT TO OUR BUDGET AND TRADE DEFICITS, TO AN OVERVALUED MARKET, TO INTEREST RATES, TO THE VALUE OF THE DOLLAR ON THE INTERNATIONAL EXCHANGES, TO PROGRAM TRADING, TO INSTITUTIONAL AND INDIVIDUAL INVESTMENT PHILOSOPHIES.

BUT WE NEED TO IDENTIFY THE REAL CAUSES AND DEAL WITH THEM.

AFTER THE SHOCK OF OCTOBER 19, THE APPARENT RESTORATION OF "NORMALCY" IS EVIDENCED BY THE MARKET'S FLUCTUATIONS WITHOUT THE ATTENDANT FREEFALLS. WE DON'T WANT TO BE LULLED INTO COMPLACENCY DURING THIS PERIOD. WE HAVE TO BE WATCHFUL TO ENSURE THAT THERE IS NO REPEAT OF WILD INSTABILITY.

THE MARKETPLACE IS DESIGNED, NOT TO SERVE ITSELF, BUT TO SERVE SOCIETY THROUGH CAPITAL FORMATION AND THROUGH THE ABILITY OF AN EFFICIENT MARKET TO FACILITATE COMMERCE.

SINCE OCTOBER 19TH WE'VE HEARD THE MARKET REFERRED TO AS A "CASINO." RATHER THAN ACTING IN ITS ORIGINAL FUNCTION, THE FOCUS OF MARKET ACTIVITY HAS TURNED INWARD ON THE GAME ITSELF. THESEC NEEDS TO LOOK AT THE CURRENT MARKET AND TAKE APPROPRIATE ACTIONS - IF THEY ARE NECESSARY - TO PREVENT THE CONVERSION OF THE MARKET INTO A WHITE COLLAR ROULETTE GAME.

CHAIRMAN RUDER - WE ARE PLEASED TO HEAR YOUR VERSION OF THE EVENTS OF OCTOBER 19. I'M SURE YOU WILL GIVE US A BETTER UNDERSTANDING OF WHAT HAPPENED AND SOME IDEA OF WHAT WE CAN EXPECT IN THE FUTURE.

The CHAIRMAN. Thank you, Senator Graham.

Senator Dixon.

## OPENING STATEMENT OF SENATOR DIXON

Senator DIXON. Mr. Chairman, as we look at operational problems on the securities exchanges, I don't think we should lose sight of the fundamental problem that must be resolved—the devastating trade and budget deficits that so threaten our economy and the entire world economy.

We must demonstrate that the Congress and the President can work together to lower deficits. We must end the gridlock that will have added over $1.8 trillion to the national debt by the end of this fiscal year.

I think we need a budget agreement now. I think we in the Congress have a responsibility to work with the President to achieve a compromise that will be larger than $23 billion, and will cover at least the next 2 years.

I believe the congressional negotiators, both Republican and Democratic, are willing to do what it takes to achieve such a compromise.

As to any operational causes of market volatility, I hope we'll not attempt to rush to judgment before we have the evidence. Given the magnitude of the problems we have been facing, I think that both the stock markets and the futures markets have performed pretty well.

I also think the preliminary evidence strongly suggests that the futures markets were not the cause of the 508 point drop in the Dow on October 19.

I think we should look at index arbitrage, portfolio insurance, program trading generally, margin requirements and all the other relevant operational and regulatory issues.

I think we should familiarize ourselves with the operations of the Stock Exchange and the futures exchanges and the role each plays in our economy.

I'm confident that this committee is not looking for scapegoats. Rather, I'm sure this committee will carefully examine all the relevant evidence and take only such action as is warranted by that evidence.

And I look forward to the testimony of Mr. Ruder along those lines to help inform this committee.

The CHAIRMAN. Thank you, Senator Dixon.

Senator Sarbanes.

## OPENING STATEMENT OF SENATOR SARBANES

Senator SARBANES. Thank you very much, Mr. Chairman.

Chairman Ruder, I hope that you will address in the course of your testimony the capacity of the Securities and Exchange Commission to address the developments that have taken place in the market.

And by that, I mean not only over recent weeks, but over recent years. There's I think considerable concern, first of all, whether the Commission continues to have the commitment to ensure through sensible and prudent regulation a structured market in which people can place confidence and reliance, that it is operating in a way that merits their confidence.

Second is the question of the resources available to the Securities and Exchange Commission to do its job. We've had in fact the anomalous situation in recent years of having the Congress urging the Chairman of the Securities and Exchange Commission to seek greater resources in order to be able to address developing problems. And the Chairman resisting that.

And I'd be interested in hearing from you your perception of the Commission's ability, if it chooses to do so, to adequately address the challenge that's before it.

Now, the Journal yesterday had a chart. I'm not sure it's necessarily the best index to use. But, of course, it compares SEC staffing with New York Stock Exchange volume, for whatever that index is worth. But it does point out the tremendous increase in market activity as compared with the resources available to the Commission to meet its regulatory responsibilities.

And it seems to me, as the new Chairman confronted now with this crisis, that this is one aspect of the matter that you need to come to grips with and not be hesitant about and give us the benefit of your best view of the Commission's capacity to address the changing situations which have taken place in the market.

Otherwise, I think there's a basis for grave concern that it is simply getting away from you. And that, in fact, that contributed to the problems that we experienced over the last few weeks.

And if that's the case, it only raises even graver concerns about the future.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Sarbanes.

Senator Dodd.

## OPENING STATEMENT OF SENATOR DODD

Senator DODD. Thank you, Mr. Chairman.

I welcome you, Mr. Chairman, here this morning. Let me raise just a couple of points, if I can. First of all, I happen to—I think most of us agree, obviously, dealing with the deficit issue—if it was not a problem before, what happened 2 weeks ago, it clearly has become an issue now. And our inability to resolve that issue could, I think, probably without any question, have a negative effect on market behavior performance.

And, obviously, the budget summit, we have Senator Domenici here with us. And I know others are working as we sit here to try and resolve those differences.

But, it seems to me, and I'd like you to address if you could a broader question that Senator Sanford touched on, and others may have before I arrived here, and that has to do with the volatility of the market and how these capital markets, how well they're operating to serve what are broader—two broader questions, it seems to me.

One is capital formation. Is this really contributing to the kind of capital formation we should be achieving given the fact that in recent days we've seen some primary issues that were about to be offered withdrawn because of the volatility of the market, and what that means.

And, second, how it affects, obviously, long-term economic interests of the country. Those are the questions.

So, when we start talking about what needs to be done to improve market performance, it seems to me we ought to be asking those questions in the context of how it contributes to capital formation and how it contributes to long-term economic growth.

It was interesting. And I'd like to ask, Mr. Chairman, if I could, that an article written in 1984 by the Connecticut Economist Nobel Prize Winner, Bob Tobin, be included in the record today.

The title of it was on "The Efficiency of the Financial System." And it was a rather remarkable——

The **Chairman**. Without objection, that will be done.

Senator **Dodd**. The title of it was on "The Efficiency of the Financial System." And it was rather remarkable, going back almost 4 years ago and writing and talking about—it could have been written yesterday, not 4 or 5 years ago, in terms of what he suggested might occur.

And just to cite a couple of things he says in that, and I'll put the whole report in there, but I think it's rather interesting.

[The report referred to may be found on p. 100.]

Tobin, Bob Tobin, questions whether the market is really efficient in reflecting fundamental values, as simply just mirrored what the average investor believed the average investor's opinion to be, which is what I suspect many of us think had more to do with what occurred a few weeks ago than anything else.

He also noted that professionals who bet on long-term fundamentals while everyone else is engaged in short-term attempts to guess better than the crowd how the crowd will behave.

And it seemed to me rather timely, that's what someone suggested has occurred.

I would add, Mr. Chairman, that the market in recent months, in recent weeks, does indicate how many people, it seems to me, were engaged in what Bob Tobin referred to as kind of a speculation on the speculation of other speculators.

And I'd like to have you address that question. Obviously, liquidity is a double-edged sword. We don't want people hiding money in mattresses. But, simultaneously, we want to make sure that we don't end up with so much speculation that capital formation is jeopardized.

And, last, and you may have included this as well, but I heard from a great number of my constituents, who are in Connecticut, I suspect maybe as a State, were harder hit. I don't know if any studies were done, but given the fact that we have the highest per capita earnings of any State in the country and the proximity to New York, I suspect my State was harder hit than any other by what happened a couple of weeks ago.

But a lot of people suggested that this notion that was raised in the tax bill on the House side in terms of the—it was the limitation of $5 million on acquisition of debt, interest on acquisition of debt, scared the daylights out of a lot of people; that this was somehow, this proposal on the House side had a tremendous effect on people getting nervous about the ability of the Congress to understand the importance of merger and acquisition.

I'm just curious from you whether or you believe that particular suggestion made on the House side, not included, I would add, on the Senate side at all in the tax bill had as much of an impact as some people have suggested, and I thank you.

The CHAIRMAN. Thank you, Senator Dodd.

Senator Domenici, you have been extraordinarily patient. We apologize. You know, we get a subject like this and there is more than one television camera in the room, the opening statements are very considerable. [Laughter.]

We apologize. Would you go right ahead?

Confine your statement to, say, 10 minutes?

Senator DOMENICI. I might even have to be shorter than that because I'm supposed to be somewhere else. I'm very appreciative of your giving me an opportunity even to appear here.

For those of you who are interested and your staff, I spent a little bit of time thinking about this and wrote it up. And I'm not going to have the time to deliver the testimony in full. So I'm going to ask you to just consider it.

The CHAIRMAN. It's a fine statement. It will be printed in full in the record.

## OPENING STATEMENT OF SENATOR DOMENICI

Senator DOMENICI. I have listened here this morning and I think I could agree with much of what everybody has said.

Clearly, I could agree with a great deal of what Senator Gramm on this side said and Senator Graham on that side. But I'm kind of reminded of what Winston Churchill said once. I'm going to paraphrase him so no one will worry it's not a real quote. But * * * [Laughter.] * * * But he said:

There's nothing as exhilarating as being shot at and missed.

I think what he really said is:

There's nothing so exhilarating as to be shot at with no result.

But we'd rather say "and been missed."

Frankly, I suggest to you that, first of all, we have a fragmented system. It's interesting that you have before you the head of the SEC, but interestingly enough, you don't have jurisdiction over that fellow who is chairman of the other entity over in Chicago that controls the futures markets. That is because, as you know, the future's markets started off with pork belly's and other commodities. When financial institutions—financial futures—came along they had a big fight over who would have jurisdiction. Now, after 5 years, they have jurisdiction over a financial market—in the form of financial futures—which is actually larger than the New York Stock Exchange.

Yes, this so-called derivative market is regulated by a body other than the SEC and yet it trades more in the way of financial securities than the New York Stock Exchange.

You there, in this committee, don't even have jurisdiction over this market. They have different rules. For those who don't think we ought to look at the rules, I submit to you that the whole marketplace that we're talking about is regulated. So I don't know that anybody ought to be so worried about if a committee, if they really are serious, is looking at the rules.

I mean, there is no "free" marketplace in either of these markets. They are already regulated. The problem is that the securities in these markets and the technology which directs the investment of the securities is changing so rapidly. As a matter of fact, the index of financial futures are only 5 years old. They're an ingenuous idea.

All you need to do is read the papers in the last few days and the New York Stock Exchange is pointing its finger at futures market over in Chicago.

And Chicago futures is pointing their finger at the other direction. Seems to me that for starters we ought to accept the admonition of Winston Churchill and say it's too bad that we didn't see an opportunity in these rapidly changing times to have a full-blown, comprehensive hearing before we got ourselves into this situation.

It's obvious to me and I hope it's obvious to everyone here that we need to take a good, solid look at the entire spectrum.

Would you believe that the Department of Labor is very much involved in what's happening?

The chairman can tell you that. They have standards for pension portfolio performance that are out there, that are absolutely binding on portfolio people who control pension plans. And they act pursuant to those standards, regardless of what's happening to the market.

Well, so what? Somebody might say. Well, they have different rules. They have different margin rates. Maybe they ought to. Or maybe they ought not. I mean, there's a lot of money being made in just trading between the two.

These performance standards have, themselves given rise to whole new investment gadgets around, like portfolio insurance. Without going into all of the details, of markets and securities, it seems to me that the issue is:

You can have bull markets in the United States. We've always had them. Bull markets in this particular instance rose to heights out of all proportion to earnings.

So should we complain about it? I don't know if we should complain about it. But the issue is, if we're going to have bull markets and bear markets in the future, are we to expect that we're going to have bull markets and bear markets that are going to vary overnight by 100, 200, 300 or 500 points?

Now, frankly, there will be some witnesses who probably are going to tell you that is the future. I really can't believe that. I can't believe that we should not aim to return to a point in time when, in spite of the direction of the market, there was some fundamental, underlying principle of value; even if only the psychology of growth or the psychology of optimism.

We have turned loose the most innovative minds in the world under a premise of making money. It would be irresponsible for us not to take a serious look at the regulatory processes and see what we can do, though not by way of recrimination.

And some people call these new instruments the result of greed. Well, whatever it is, that's where we are. I have in my statement some of the most incredible, unique instruments of security that are being sold out there that you could ever imagine.

They now have a security that they're selling that is based on somebody's automobile inventory. And you can buy and sell those. Nobody would have even thought of those before. I'm not saying there's anything wrong with them, but it seems to me rather than go through the details, we should ask:

How serious is it for our country, with a $4 trillion dollar GNP to suffer overnight a diminution in wealth equal to one-fourth of the GNP of the country?

That's one way to look at the 500 point drop. People will say that's only paper. Well, that's what everybody deals in, so it's become real.

We have no way of imagining the ramifications of this down into Main Street, America. How do we know how many small businessmen have collateral that is no longer acceptable to their local bank? They may have to liquidate. They may have to do something else, because it was worth one thing one day and another hugely different amount the next day.

It seems to me that, if you are going to conclude we are living in a fragile, new, international marketplace where events occur quickly and new and ingenuous processes are discovered almost daily, we cannot operate with regulatory processes of another age. They are not. If you conclude that they are then, obviously, you are missing the point.

Some will use this experience to recriminate against fiscal and other policies that cannot be affected by this committee. If this is the entirety of the final result of your inquiry, then I believe we're going to leave unscathed an opportunity to move our regulatory processes into the twentieth century in a very intelligent and forthright manner with the assistance of experts.

Frankly, you could put them in a room and between Wall Street and the Merc, if you could get them to talk to each other, they could give you a list right now of 10 things that are wrong that ought to be fixed.

I just pulled that out of the hat, but I'm positive that's the case. This process would lend itself to stability, not to trying to impose recriminations, but to stability, in a very different marketplace than we had 15 or 20 years ago.

You know, we had the great fall and then we had a depression. Back there in the '29s, '30, '31 '32, nobody complained about putting a margin rule in and said, my gosh, you're interferring with the marketplace. We had to do something. We did it.

It seems to me the same thing is the case here. I've listed about five things that I think ought to be looked at. For example, whether this august committee likes it or not, there's about 50 percent of the jurisdiction of the issue over in the Agriculture Committee. This is because futures had their beginnings in commodities that were unrelated to paper securities.

Senator Gramm—you were showing me a pencil and I didn't get the message. I'm not here to quibble with the computer. If we can get faster ones, we ought to get faster ones. If we don't, the other guys will. And we ought to use them.

But I don't think that's really the issue here. The issue is what are the rules of the game that you apply to modern financial instruments?

There's one other new thing that's obvious. There are three or four centers of stock market activity that are huge, and they're not in the United States. And they operate on a different time cycle. They operate with their own rules. That contributes to the problem we've got.

I don't think we even contemplated global markets when we put most of these regulations on the books.

I apologize for not being able to go into more detail with my analysis, but I thank you very much for the opportunity.

And let me say, for all of the good wishes for a deficit reduction package that is significant and real, all I can tell you is we are trying. It is far more difficult than any of you could really believe, because it's kind of a chicken and the egg.

Who wants to agree to the tough things first and be the first ones out there, because they're afraid? Everybody's fearful that they will be blamed.

But I'm optimistic that within the next few days, we'll get a real package.

And I thank you for your hospitality.

[The complete prepared statement of Senator Domenici follows:]

# TESTIMONY

## HEARING ON STOCK MARKET VOLATILITY

SENATE BANKING COMMITTEE

Senator Pete V. Domenici

November 4, 1987

FIRST, MR. CHAIRMAN I WANT TO THANK YOU FOR THE OPPORTUNITY TO EXPRESS SOME OF MY CONCERNS ABOUT THE OCTOBER 19TH STOCK MARKET CRASH, NOW COMMONLY KNOWN AS BLACK MONDAY. THIS DAY SIGNALLED THE NEED FOR CHANGE ON MANY FRONTS, ONE OF WHICH IS CLEARLY THE FEDERAL BUDGET.

BUT THE DAY'S EVENTS ALSO SUGGEST TO ME THE VERY REAL POSSIBILITY THAT OUR REGULATORY PROCESSES HAVE NOT FULLY KEPT PACE WITH THE VAST CHANGES IN SECURITY MARKETS IN RECENT YEARS. THIS IS THE SUBJECT OF YOUR HEARINGS AND I COMPLIMENT THE COMMITTEE FOR TACKLING A PROBLEM OF MINDBENDING COMPLEXITY.

RAPID GROWTH IN DIFFERENT TYPES OF SECURITIES, INCLUDING THE SO-CALLED DERIVATIVE SECURITIES LIKE INDEXED STOCK FUTURES, HAS REWRITTEN THE BOOK ON FINANCIAL INVESTMENTS. WE IN CONGRESS WHO HAVE THE ULTIMATE RESPONSIBILITY FOR REGULATING THESE SECURITIES AND THEIR MARKETS UNDERSTAND VERY LITTLE ABOUT HOW THESE SECURITIES AFFECT THEIR CASH COUNTERPARTS OR THE IMPLICATIONS FOR THEIR WIDESPREAD USE IN VARIOUS PORTFOLIO INVESTMENT TOOLS.

LET ME SAY TO YOU AT THE OUTSET THAT I COME HERE NOT AS AN EXPERT ON THE SUBJECT OF SECURITIES MARKETS. HOWEVER, AS A MEMBER OF THE SENATE, I AM CONCERNED THAT WE EXPLORE FULLY ALL OF THE WAYS IN WHICH INVESTMENT PRACTICES -- AND SECURITIES THEMSELVES -- HAVE CHANGED IN RECENT YEARS SO THAT WE CAN BE CERTAIN THAT THE PUBLIC'S INTEREST IS WELL SERVED.

THERE WERE MANY REASONS FOR THE FALL IN STOCK PRICES NOT THE LEAST OF WHICH IS THAT THE STOCK MARKET ITSELF WAS OVERVALUED. DEPENDING ON HOW YOU WANT TO CALCULATE IT, STOCK PRICES WERE SELLING ANYWHERE FROM 19 TO 25 TIMES THE PROFITS OF THEIR CORPORATIONS. WE HAD NOT SEEN THESE KINDS OF VALUES SINCE THE "GO-GO" DAYS OF THE 1960s.

THE STOCK MARKET CONTINUED TO RISE THIS YEAR, EVEN IN THE FACE OF RISING INTEREST RATES. MAYBE IT WAS JUST UNSTOPPABLE OPTIMISM, ALTHOUGH IT CERTAINLY DID COME TO AN ABRUPT HALT.

BUT THE FACT REMAINS THAT LONG TERM BONDS, WHICH ARE THE PRINCIPLE INVESTMENT ALTERNATIVE TO COMMON STOCKS, HAD BEEN DECLINING SINCE AUGUST 1986 AND DECLINING IN EARNEST SINCE APRIL OF THIS YEAR. BY THE MORNING OF "BLACK MONDAY", LONG TERM BOND PRICES HAD DECLINED 30 PERCENT FROM THEIR PEAKS. BY THAT NIGHT, STOCKS TOO HAD DECLINED 30 PERCENT FROM THE AUGUST PEAK OF OVER 2700.

THE DISASTER IN FINANCIAL MARKETS TO A LARGE DEGREE REFLECTS A CRISIS IN CONFIDENCE IN ECONOMIC POLICY -- BEGINNING WITH BUDGET POLICY. AS THE COMMITTEE IS WELL AWARE, THE CONGRESS AND THE ADMINISTRATION ARE CONTINUING TO MEET.

THE ISSUE BEFORE THE COMMITTEE, HOWEVER, IS NOT WHY THE STOCK MARKET FELL, BUT WHY, ONCE IT BEGAN TO FALL, IT WENT INTO "FREE-FALL". OVER THE COURSE OF THE DAY ON OCTOBER 19TH, THE CASH MARKET FOR STOCKS DECLINED 20 PERCENT AND STOCK FUTURES PRICES DROPPED 26 PERCENT AS MEASURED FROM THE HIGH TO THE LOW OF THE DAY.

ON THE MORNING OF OCTOBER 19TH, THE MARKET VALUE OF COMMON STOCKS IN AMERICA WAS $3.3 TRILLION. OVER THE COURSE OF THE DAY, WE REVALUED THOSE ASSETS TO SOMEWHERE BETWEEN $2.3 AND $2.7 TRILLION.

THIS MEANS THAT VALUE OF STOCK-RELATED FINANCIAL INSTRUMENTS IN AMERICA DECLINED BY AS MUCH AS $1.0 TRILLION IN JUST FIVE TRADING HOURS. THIS IS AN ENORMOUS SUM EVEN IN OUR $4.4 TRILLION ECONOMY.

ONE QUESTION THAT THIS COMMITTEE MUST ANSWER IS THE EXTENT TO WHICH THIS SHOCK -- WHICH SENT A FINANCIAL EARTHQUAKE AROUND

THE WORLD -- IS REFLECTION OF NEW ECONOMIC TIMES. THE WORLD IS A GLOBAL MARKET PLACE, NOT ONLY FOR GOODS AND SERVICES, BUT ALSO FOR CAPITAL.

IT APPEARS TO ME VERY LIKELY THAT THE STRUCTURE OF OUR FINANCIAL MARKETS -- AND IN THIS I INCLUDE THE REGULATORY PROCESS AS WELL -- HAS NOT ADAPTED TO THE TRULY INTERNATIONAL CHARACTER OF MARKETS. IN HIS ARTICLE IN THE WASHINGTON POST THIS MORNING, ROBERT SAMUELSON OBSERVED THAT "WE LIVE IN AN ERA OF GLOBAL ECONOMICS AND LOCAL POLITICS".

ALTHOUGH HE APPLIED THIS STATEMENT TO THE BUDGET DEFICIT, IT IS EQUALLY TRUE OF THE STRUCTURE OF MANY OF OUR ECONOMIC SECTORS. I AM PARTICULARLY AWARE OF THE IMPACT OF GLOBAL CHANGE ON SCIENCE AND TECHNOLOGY BECAUSE OF THE TWO NATIONAL LABS AND THE ELECTRONICS INDUSTRY IN MY OWN STATE OF NEW MEXICO.

BUT, I THINK THAT THE SAME STRUCTURAL PROBLEMS MAY ALSO EXIST IN THE FINANCIAL SECTOR. OUR FINANCIAL MARKETS AND THEIR REGULATORY SYSTEM GREW UP WHEN THE UNITED STATES WAS THE WORLD'S CAPITAL MARKET.

TODAY, WE LIVE IN A WORLD OF MANY CAPITAL MARKETS. MAYBE MORE IMPORTANT IS THE FACT THAT THESE CAPITAL MARKETS DO NOT REACT ONLY TO FUNDAMENTAL ECONOMIC VALUES BUT ALSO TO THE EXTENT OF COORDINATION OR CONFLICT IN INTERNATIONAL ECONOMIC AND

CURRENCY POLICIES.

I SUBMIT TO YOU THAT WE MAY BE ENTERING A WORLD OF NEW VOLATILITY IN ALL FINANCIAL MARKETS. THE EXTENT OF THIS VOLATILITY MAY HAVE BEEN DISGUISED AS MARKETS ROSE AND GENERALLY POSITIVE FORCES, INCLUDING DRAMATIC INCREASES IN THE AMOUNT OF MONEY AVAILABLE TO MARKETS, REENFORCED ONE ANOTHER.

WE MAY NOT BE SO LUCKY IF MARKETS ARE UNCERTAIN OR IF THEY MOVE DOWN. ALL OF THE CROSS CURRENTS THAT AFFECT MARKETS TODAY -- NOT THE LEAST OF WHICH IS THE IMPACT OF THE PROCESS OF STABILIZING CURRENCIES -- MAY MEAN THAT MARKETS WILL BE MUCH MORE VOLATILE. THIS COMMITTEE SHOULD BE CONCERNED THAT THE REGULATORY PROCESS DOES NOT CONTRIBUTE TO THAT VOLATILITY.

IN RECENT YEARS, FINANCIAL MARKETS HAVE BECOME A BIG, INDEED, ENORMOUS BUSINESS. IN 1976, THE AVERAGE DAILY VOLUME ON THE NEW YORK STOCK EXCHANGE WAS 21 MILLION SHARES. IN 1986, THE AVERAGE DAILY VOLUME WAS 141 MILLION SHARES.

THIS MEANS THAT THE VOLUME OF STOCK TRADES IS UP ALMOST 7 TIMES OVER THE DECADE. ON OCTOBER 19TH, THERE WERE 600 MILLION SHARES TRADED ON THE NEW YORK STOCK EXCHANGE ALONE.

THE NEW YORK EXCHANGE IS BY NO MEANS THE ONLY EXCHANGE ALTHOUGH IT IS BY FAR THE LARGEST. ABOUT 30 TO 40 PERCENT OF THE TOTAL VALUE OF STOCKS TRADE ON OTHER EXCHANGES AND MARKETS, THE AMERICAN, THE PACIFIC COAST STOCK EXCHANGE, AND NASDAQ ( NATIONAL ASSOCIATION OF SECURITIES DEALERS AUTOMATED QUOTATION).

THIS IS NOT ALL. TRADING IN THE NEW AND MYSTERIOUS FINANCIAL FUTURES MARKETS ON THE CHICAGO MERCANTILE EXCHANGE HAS SIMPLY GONE THROUGH THE ROOF. FROM NEXT TO NOTHING IN THE EARLY 1980S, FINANCIAL FUTURES TRADING LAST YEAR AVERAGED 78 THOUSAND CONTRACTS A DAY FOR A AVERAGE DAILY VOLUME OF OVER $10 BILLION. THIS DWARFS THE $4.2 BILLION OF STOCKS THAT TRADE DAILY ON THE NEW YORK STOCK EXCHANGE.

THIS IS ALL BY WAY OF ILLUSTRATING THAT OUR WORLD OF FINANCIAL MARKETS HAS CHANGED DRAMATICALLY. WE HAVE INSTRUMENTS THAT WE WOULD HAVE NEVER DREAMED OF EVEN FIVE YEARS AGO.

WE MAKE SECURITIES OUT OF EVERYTHING. WE ARE ALL FAMILIAR WITH MORTGAGE-BACKED SECURITIES. BUT WHO WOULD DREAM THAT YOU CAN BUY A FINANCIAL ASSET SECURED BY SOMEONE'S AUTOMOBILE INVENTORY?

IT IS NOT ONLY SECURITY MARKETS THEMSELVES THAT ARE

CHANGING BUT ALSO THE WAYS IN WHICH INVESTORS BEHAVE. TODAY, BIG INSTITUTIONAL INVESTORS NOT ONLY DEAL IN THESE MARKETS FOR PROFIT BUT THEY HAVE TO MEET FEDERALLY IMPOSED STANDARDS OF PRUDENCE.

IT IS NOT SURPRISING THEREFORE THAT INVESTORS, PARTICULARLY LARGE INSTITUTIONAL PENSION MANAGERS, HAVE ADOPTED NEW PORTFOLIO INVESTMENT SCHEMES TO IMPROVE THE CHANCES THAT THEY WILL MAKE MONEY AND AT THE SAME TIME REDUCE THEIR RISK.

THESE DEVICES INCLUDE ALL OF THE THINGS WE HAVE HEARD AND READ ABOUT -- PORTFOLIO INSURANCE, PASSIVE INDEX FUNDS, ARBITRAGE ETC. FINANCIAL TRADE PUBLICATIONS SUGGEST THAT AT LEAST $100 BILLION IN PENSION ASSETS USE PORTFOLIO INSURANCE. THERE IS PROBABLY ANOTHER $100 TO $200 BILLION IN PENSION ASSETS THAT ARE GOVERNED BY PASSIVE INDEX FUNDS.

THIS MEANS THAT SOMEWHERE BETWEEN ONE-THIRD AND ONE HALF OF ALL PENSION FUNDS ARE RUN BY CAREFULLY CRAFTED RULES. THESE RULES ARE NOT GUIDED BY INDIVIDUAL JUDGMENT BUT RATHER BY THE BEHAVIOR OF THE MARKETPLACE.

FOR EXAMPLE, IN PORTFOLIO INSURANCE, A DECLINE IN THE MARKET OF A GIVEN AMOUNT SENDS A SELL SIGNAL TO THE TRADING ROOM. IN PASSIVE INDEX FUND, A RISE STOCKS RELATIVE TO BONDS COULD SEND A BUY SIGNAL. THE SAME IS TRUE OF THE PRICES OF STOCKS RELATIVE TO

FUTURES. ALL OF THIS HAPPENS RATHER AUTOMATICALLY.

THESE INVESTMENT APPROACHES MAY BE WELL AND GOOD WHEN THEY ARE USED BY JUST A FEW INVESTORS.

HOWEVER, THESE SCHEMES ARE NOT JUST THE PROPERTY OF A FEW ASTUTE MARKET PLAYERS. THEY ARE COMMONPLACE AMONG INSTITUTIONAL INVESTORS WHO TOGETHER ACCOUNT FOR A LARGE PORTION OF THE TOTAL MARKET. WHEN THESE INSTITUTIONS BASE THEIR ACTIONS ON THE SAME SET OF INVESTMENT RULES, THEY BECOME THE MARKET. IN ESSENCE, THEY BEGIN TO BID AGAINST THEMSELVES.

OUR FINANCIAL MARKETS IN THIS COUNTRY ARE REVERED BECAUSE THEY ARE AS CLOSE TO PERFECTLY COMPETITIVE CAPITAL MARKETS AS ANY IN THE WORLD. I MEAN COMPETITIVE IN THE SENSE THAT NO ONE INVESTOR IS LARGE ENOUGH TO DICTATE THE PRICE OF ANY SECURITY.

BUT IT IS CLEAR THAT THE WIDESPREAD USE OF THESE PORTFOLIO TOOLS BY LARGE INVESTORS RUNS THE RISK THAT THEY WILL ALL REACT SIMULTANEOUSLY TO THE SAME SIGNALS. THIS CAN PRODUCE A "RUN" ON THE MARKET.

WHEN YOU HAVE LARGE, HIGHLY LIQUID AND LOOSELY REGULATED

MARKETS IN SECURITIES THAT HAVE A RETURN THAT THIS TIED TO STOCKS -- OTHERWISE CALLED DERIVATIVE SECURITIES -- THIS "RUN" ON THE MARKET CAN PICK UP THE PACE. THIS PROCESS WAS VERY CLEAR ON THE 19TH WHEN THESE INDEXED STOCK FUTURES, WHICH NORMALLY SELL AT A PREMIUM TO THE STOCKS THEMSELVES, WERE SELLING FOR AS MUCH AS A 35 PERCENT DISCOUNT.

TO WHAT EXTENT, THESE AUTOMATIC RULES WERE RESPONSIBLE FOR THE FAILURE OF MARKET TO STABILIZE ITSELF ON THE 19TH IS FOR THIS COMMITTEE TO DETERMINE. TO WHAT EXTENT, FINANCIAL FUTURES OVERLOADED THE NORMAL SPECIALIST SYSTEM ON THE REGULAR EXCHANGES I REALLY COULD NOT BEGIN TO SAY.

BUT, THERE ARE A FEW CONCLUSIONS I DRAW FROM THE EVENTS OF THE PAST TWO WEEKS WHICH I SUBMIT FOR YOUR CONSIDERATION.

FIRST, A LARGE PORTION OF THE MARKET ACTING INDEPENDENTLY BUT GUIDED BY THE SAME SET OF INVESTMENT PRINCIPLES CAN CHANGE THE BASIC COMPETITIVE STRUCTURE OF THE MARKET.

SECOND, NEW INSTRUMENTS SUCH AS FINANCIAL FUTURES PROVIDE LIQUIDITY TO THE MARKETS WHICH INTERACT WITH THE TRADITIONAL MARKET-MAKING SYSTEM. IN THE CASE OF "BLACK MONDAY", IT IS CLEAR THAT, THESE SECURITIES MADE IT MORE DIFFICULT FOR THE REGULAR EXCHANGES TO STABILIZE MARKETS.

THIRD, THE DIFFERENCES IN THE MARGIN REQUIREMENTS AND TRADING RANGES IN THE SECURITIES THEMSELVES ENCOURAGE MARKETS TO TRADE BACK AND FORTH IN ORDER TO CAPITALIZE ON THESE DIFFERENCES. THIS MEANS THAT INVESTORS CAN MAKE MONEY BASED ON THE DIFFERENCES IN THE REGULATORY STRUCTURE INSTEAD OF THE UNDERLYING VALUE OF THE SECURITY.

FOURTH, AND FINALLY, INVESTMENT TOOLS WHICH ARE DESIGNED TO REDUCE RISK MAY INADVERTENTLY INCREASE RISK. THESE TOOLS ENABLE MONEY MANAGERS TO HOLD MORE STOCKS THAN THEY OTHERWISE WOULD WHICH HELPS SUPPORT STOCK PRICES ON THE WAY UP. BUT, THEY ALSO CAN CAUSE MONEY MANAGERS TO SELL STOCKS FASTER THAN THEY OTHERWISE MIGHT, WHICH HASTENS THE SLIDE ON THE WAY DOWN.

THE PROBLEM IS COMPOUNDED IF THESE INVESTMENT TOOLS ARE USED BY TOO BROAD A SEGMENT OF THE FINANCIAL MARKET OR IF THEY INTERACT IN UNINTENDED WAYS WITH OTHER SECURITIES. THESE KINDS OF SECONDARY EFFECTS CAN ACTUALLY UNDERMINE THE NORMAL MARKET STABILIZING PROCESSES. I THINK YOU WILL FIND MANY MONEY MANAGERS TODAY WHO NOW REALIZE THE RISK INHERANT IN THEIR RISK-AVOIDANCE SCHEMES.

THE ISSUE FACING THIS COMMITTEE IS NOT WHETHER MARKETS ARE OR SHOULD REMAIN FREE. THEY ARE NOT NOW FREE. WE REGULATE THEM.

THE ISSUE FACING THIS COMMITTEE IS NOT WHO IS TO BLAME FOR THE RECENT CRISIS IN FINANCIAL MARKETS. THERE IS BLAME ENOUGH FOR ALL.

THE TASK FOR THIS COMMITTEE IS TO DEFINE THE PUBLIC INTEREST AND TO DECIDE WHETHER THE PUBLIC INTEREST IS BEING SERVED BY THE CURRENT REGULATORY STRUCTURES.

AT A VERY MINIMUM, WE NEED TO ASSESS WHETHER OR NOT SECURITIES WHICH ARE ESSENTIALLY ALIKE SHOULD NOT ALSO BE REGULATED ALIKE.

IN THE EXTREME, WE MAY NEED TO RECONSIDER THE WHOLE REGULATORY FRAMEWORK THAT GOVERNS ALL FINANCIAL MARKETS AND ALL TYPES OF SECURITIES IN THIS COUNTRY. THE CURRENT REGULATORY STRUCTURE IS FRAGMENTED AND UNWIELDY.

WE HAVE THE FEDERAL RESERVE, THE SEC, THE CFTC, THE TREASURY, AND EVEN THE DEPARTMENT OF LABOR INVOLVED. IRONICALLY, THE CFTC, WHICH WAS ORIGINALLY CREATED TO REGULATE FARM COMMODITY FUTURES NOW REGULATES ALMOST AS MUCH IN THE WAY OF FINANCIAL SECURITIES AS THE SEC. MOREOVER, IT IS NOT CLEAR THAT EXISTING CAPITAL REQUIREMENTS ARE ADEQUATE FOR THE NEW WORLD OF GLOBAL FINANCE.

IN RECENT YEARS, WE HAVE CREATED ENORMOUS OPPORTUNITY AND ECONOMIC POWER IN OUR FINANCIAL MARKETS. THIS POWER SHOULD NOT CONTROL US. WE SHOULD CONTROL IT.

THE ROLE OF THIS COMMITTEE, FOR WHICH I SINCERELY COMMEND YOU, IS TO SEE THAT WE EFFECTIVELY DIRECT THIS POWER AND THAT IT CONTINUES TO SERVE OUR BROAD ECONOMIC INTERESTS.

The CHAIRMAN. Well, thank you, Senator Domenici. Do you want to answer questions or do you want to leave? You can do either one. We do have, as you know, a very distinguished witness, and we would like to get to him as soon as we can. On the other hand, if you would like to respond to questions, we can maybe have 2 minutes for each member.

Senator DOMENICI. Well, I am really already 15 minutes late for that summit that you all want me to go to.

The CHAIRMAN. Thank you very much, then, for a fine statement.

Senator DOMENICI. Thank you, Mr. Chairman.

The CHAIRMAN. Well, Mr. Ruder, you are also a very patient man. You have had to listen to our sage comments, and now we want to listen to somebody who knows what they're talking about. Please go right ahead.

## STATEMENT OF DAVID S. RUDER, CHAIRMAN, SECURITIES AND EXCHANGE COMMISSION

Mr. RUDER. Thank you very much, Mr. Chairman. I am delighted to be here. This is my first testimony before your committee except for the testimony which I gave in connection with my confirmation hearings. I am delighted that I am now able to testify and that you had faith enough in me to confirm me.

I hope that as the events of the next few months and years go by that you will be increasingly satisfied with the fact that you have confirmed me.

This is not only my first testimony but, to my knowledge, it is the first testimony, public testimony, before Congress of anyone intimately associated with the events of the last few weeks. For that reason, I consider it an important event, one which I hope can be viewed as the first step in a series of studies and testimony.

### DRAMATIC PRICE DECLINES

These weeks have seen, as you know, a record 508-point drop in the Dow, followed by 102-point and 186-point rises. But I might note for you that the week of October 5 saw us with a 158-point negative drop on the Dow, and the week of October 12 saw us with a 235-point negative drop on the Dow, and during the days of October 14, 15, and 16 we had drops of 95 points, 58 points, and 108 points. So that prior to "Black Monday" there was a significant decline in the stock market.

I might also note for you just for recordkeeping purposes that on August 12, 1982, the Dow was at 776 and that approximately 5 years later the Dow was at a high of 2736. So we have seen volatility over a 5-year period, I think on the upside followed by volatility on the downside, certainly a strong and dramatic increase in overall volatility.

These recent dramatic price declines have been broad based, with the NASDAQ and AMEX indices down over 20 percent since October 19, and all of the markets have experienced daily volumes that have exceeded all previous records.

You should really be aware of this fact in analyzing what has happened. Prior to the week of October 12, a 200-million-share day on the New York Stock Exchange was thought of as being a large day. There had been only 1 day with over 300 million shares. Yet, on October 15, we found a volume of 263 million shares, on October 16 a volume of 338 million shares, and then during the week of October 19, we had volumes which dramatically exceeded anything in the past: on October 19, 604 million shares, roughly three times what was a normal high; October 20, 608 million; October 21, 449 million; and October 22, 392 million. On each of those 4 days you had volume exceeding any previous volume by an enormous amount.

So, not only are we looking at volatility, but we are looking at enormous volume changes.

It is also important to note that in the foreign markets we had turmoil during this time. The London and Japanese markets declined 33 percent and 17 percent from their 1987 highs during the October 19 period.

Now, the Commission is deeply concerned about the impact of market volatility. I should tell you that my personal concern has preceded the events of the past few weeks. My first major speech as Chairman was delivered in early October in Chicago and in, I think, a prescient manner it dealt with the problems of volatility in the stock market.

You asked me during my confirmation hearings whether I would be hard on insider trading and whether I would pay close attention to the problems in the takeover area. And I agreed that I would. But my private agenda after I came to the Commission was to be concerned about this market volatility both in the United States and abroad.

### BEGINNING ANALYSIS OF RECENT MARKET EVENTS

Following the market volatility problems, we are commencing an immediate analysis of the recent market events. I asked my staff to begin that analysis during the week of October 19. We are beginning it. We were delayed partially during the remainder of that week and during the week of October 26, by market events, but we are still actively engaged in that study process.

I have in my written testimony, and I will in these remarks and in answer to questions, describe the Commission's oversight of operational and financial integrity in the markets during these past weeks, and I will set out some fundamental questions that our study must address and answer.

I would like to answer interstitially as I go through my prepared opening remarks some of the questions which were raised by the various Senators. I want you to know that the Securities and Exchange Commission is an independent regulatory agency and that we are committed under my direction to regulating if that regulation is necessary.

I will, when an appropriate question comes, deal with the subject of our resources, but I do want you to know that during this past 2 or 3 weeks our staff performed in ways which made me extremely proud and that we had adequate resources to meet the peak demand requirements. I do not think, as I will indicate to you later, that we have the resources both to conduct the study and to do the kind of contemplative thinking and to go forward with our obligations that we would really like to have.

So what happened during this period that we are concerned about? The Commission's expanded monitoring began on October 6, when the Dow dropped 91 points. That day, curiously enough, was the day of my volatility speech. Beginning on October 14, when we had the beginning of the last 3 days of declining prices, the Commission staff began on an emergency basis to canvass the various self-regulatory organizations concerning the financial conditions of broker-dealers.

### BEGIN AN EMERGENCY MONITORING SYSTEM

Then, when we got into the last 3 days, on October 14, 15, and 16, it began to seem that the markets were declining precipitously. I instructed our staff to begin an emergency monitoring system. The senior staff of the Division of Market Regulation held weekend discussions and planned for monitoring. Now, on the morning of October 19 we began a series of telephone calls and during that week I was personally involved in talking constantly with the various people who were involved in the regulatory process both at the exchange level and indeed at the brokerage firm level.

I personally spoke with John Phelan about 9:30 on Monday morning and learned about order imbalances, and throughout the day our staff, myself included, were in constant communication with the New York Stock Exchange to determine volume, the extent of order imbalances, the capital positions of specialists, and any operational problems occurring at the exchanges.

Throughout that day the staff was, as I say, in contact with major broker-dealers, and on Monday afternoon I spoke personally with three leading CEO's of brokerage firms. There was an enormous contact not only at the exchange and broker-dealer level but with all other agencies, as I say, clearing agencies, options markets, mutual funds, and order routing firms. And I can tell you that on Monday and Tuesday of the last 2 weeks our Commission was on what I would call a war-room footing. We were really concerned and monitoring and acting, I felt, responsibly in cooperating with the other regulators to see that matters were being handled well.

Our significant activities, regulatory activities, which we took during that week included various matters, including cooperating with the New York Stock Exchange in its curtailing of program trading and worrying about the New York stocks' very strong order imbalance crisis on October 20, which was Tuesday. They had almost 90 stocks that were not open during the middle of that day.

We cooperated with regard to the early closing of the exchanges beginning later in the week, on Friday, October 23. We worried about the liquidity problems of options market-making clearing firms. We cooperated with regard to increasing margin requirements in stock-index options contracts.

We assisted corporations in beginning their buying programs, which I think helped the market to recover somewhat, by interpreting our own rule 10b–18 relating to the acquisition by corporations of their own stock, and we dealt on an individual basis with both the various mutual funds and the mutual fund trade organization.

As I have indicated, in the near term our staff has been asked to investigate the causes and effects of this volatility. And let me tell you what we are going to do, and it won't be everything we are going to do.

## ROLE OF INDEX-RELATED TRADING

First, we are going to address the role of index-related trading on the markets during the past weeks. Our preliminary information is that so-called index arbitrage and portfolio insurance activities were significant during the market downturns, particularly on October 16 and the 19 and 20. When I say significant, I do not mean to quantify; I merely say that we have some indication that there was a significant contribution here.

The study will also cover other questions raised by these events, including the adequacy of dealer capital to deal with increased volume and volatility. And I may say that I personally consider the question of adequate capital in our markets to be one of the crucial things which needs to be examined. We will be looking at the financial integrity regulations for our broker-dealers, their net capital requirements.

At this point I would like to emphasize that, based upon current information, including a conversation I had this morning with John Phelan, we still do not see any problems with the major securities firms. They are currently in a strong capital position.

Additionally, we will be studying a matter which gave us great concern, and that is the market's operational capacity for order execution, order routing, and clearance functions. This is a problem which was difficult on the New York Stock Exchange itself. There were problems relating to the order execution capability by a number of firms using an independent processing agent. We need to know whether or not there is a way—I am not even going to say "whether or not"—we are going to insist that there be adequate routing systems, settlement, and clearance functions in the future.

## FOREIGN CAPITAL WAS TRANSFERRED OUT OF OUR MARKETS

We will also attempt to study the relationships between the various foreign and domestic markets during this period, and in particular our study will determine the extent to which foreign capital was transferred out of our stock markets during the past week, during the market break.

I may also indicate to you that the interrelationship between stock markets, foreign stock markets, and our domestic markets has been a matter of concern at the Commission and to me personally. I think it is part of the package which exists between our domestic markets and the foreign markets, that they have to be looked at together.

Just after I came into office, I went to Rio de Janeiro and participated in a conference with all of the securities commissioners from around the world. We have been in contact directly with the London administrators, the Department of Trade and Industry, the International Stock Exchange, and the newly formed Securities and Investments Board, and had I not had the events of these 2 weeks in question to deal with, I would have been in Japan on a long-scheduled trip to talk to the Japanese about this market.

The events of these last weeks have, I think, tested the efficiencies of our market's trading systems, their personnel, and settlement operations. I may say that we should all be glad that the systems and the industry handled this question quite well under the circumstances. We did not have a breakdown in the efficiencies of our markets.

This whole event is so impressed upon my memory. I had one telephone call with John Phelan on Monday morning, and he said, "Well, it looks like our exchanges are going to go to a 400 million share day." He said, "That will really test us." And they went to two 600 million share days and were able to cope with that.

I do believe that unraveling and analyzing the events of the past week should be and is my first priority. We will be cooperating with Congress. We are going to be cooperating with the Brady Commission, which has been established by President Reagan, and I would pledge my energies and those of our staff to advising Congress as best we can as to what needs to be done.

Thank you, Senator Proxmire.

[The complete prepared statement of David S. Ruder follows:]

# STATEMENT OF DAVID S. RUDER

# CHAIRMAN OF THE SECURITIES AND EXCHANGE COMMISSION

# BEFORE THE SENATE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

Concerning the Commission's Oversight
of the Securities Markets' Recent
Price Volatility and Record Volume

## I. Introduction

Chairman Proxmire and Members of the Committee:

I appreciate the opportunity to testify before the Committee concerning the dramatic market events of the past two weeks. The Commission is deeply concerned about the impact of market volatility on public investors, market professionals, and the structure of the market itself. During the past two weeks the Commission has actively monitored the securities markets and has been actively involved in ensuring that appropriate steps were taken to respond to the record volume and volatility. As announced during the week of October 19th, I have instructed the Commission staff to commence an analysis of the recent market events. The study will develop specific recommendations regarding what reforms may be needed in the regulation of the stock and derivative markets. Today, I will summarize the current status of the markets and the Commission's ongoing oversight of the operational and financial integrity of these markets. In addition, I will set out the fundamental issues that our study must address and answer. Finally, I will address, preliminarily, the questions raised in the Committee's letter of invitation to testify.

## II. Description of Market Events

The recent market events have been truly extraordinary. A description of recent market indicators provides a sense of their historic proportions.

On August 21, 1987, the Dow Jones Industrial Average ("DJIA") reached its highest level ever, 2,736. This was over three times its closing value of 773 on August 12, 1982. Markets in other countries were experiencing similar unprecedented rises: In 1987, the Nikkei 225 Index, a leading Japanese market indicator, and the London Financial Times ("FT") Stock Exchange ("SE") 100 Index also reached three times their August 1982 levels. Similarly, price-earnings ratios were at historically high levels, reaching

an average of 20 for New York Stock Exchange ("NYSE") stocks and above 50 for the major Japanese stocks, as compared with 1984 levels of 10 and 37, respectively.

### A. The Week of October 12

The U.S. markets declined in September, and indeed when the DJIA fell 91 points on October 6 -- then a record drop -- it was at 2,548, or 6.8% off its August high. The week of October 12th the DJIA declined 235 points, or another 10%, with then record daily price declines of 95 and 108 on Wednesday the 14th and Friday the 16th.

Volume the week of October 12 also was rising, reaching a record 338 million shares on the NYSE on the 16th. Prior to October 16, there had been only one 300 million share day on the NYSE, January 23, 1987, when the DJIA fell 44 points. The NYSE average daily share volume to date in 1987 had been approximately 180 million.

There also was very high volume in the stock index options and futures markets during the week of October 12. [1] Volume in the principal stock index futures contract, the Standard and Poors ("S&P") 500 contract traded on the Chicago Mercantile Exchange ("CME"), reached 135,000 contracts on Friday, 68% more than the average daily volume. Volume in the most heavily traded stock index option, the S&P 100 option traded on the Chicago Board Options Exchange ("CBOE"), was 729,099 contracts on Wednesday, 801,767 contracts on Thursday, and 930,819 contracts on Friday. Average daily volume for the year prior to this time has been a little more than 435,000 contracts.

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[1] A futures contract represents an obligation to make or take delivery of a specified quantity of a commodity at a specific time in the future for a specific price. An option is a contract that provides the buyer the right to buy (or sell) a specified amount of the underlying interest at a fixed price for a limited period of time. A stock index futures contract represents the obligation to make a cash settlement upon the expiration of the contract based upon the stock index value at that time. A stock index option provides the holder the right on exercise to receive the difference between the index's value at exercise and the exercise price of the option. See Appendix I for a glossary of terms and a simplified description of options and futures and of index arbitrage and portfolio insurance. See Appendix II for a description of the jurisdiction of the Commission and the Commodity Futures Trading Commission over stock index options and futures, respectively, and a list of products.

### B. "Black Monday" -- October 19

On Sunday night, October 18, in the first major market trading since the DJIA's 108 point drop on the preceding Friday, the Nikkei 225 dropped substantially. The Japanese markets closed down 2.35% at 1:00 a.m. Monday, New York time. In London, at 4:00 a.m. New York time, the FT-SE 100 Index opened down 5.6%. This Index would close down 10% on the day. In the United States during morning trading, the DJIA first fell over 200 points, then climbed almost 100 points. It then began a steep downward plunge, dropping an additional 400 points by the close of trading. The closing value of 1734 represented a loss of 508 points, or 22%, from Friday's close, and a 36% decline from August's peak. This day's absolute price decline in the DJIA was four times the record set the preceding Friday; the percentage decline was twice the previous record, which was set on October 29, 1929. Six hundred and four million shares were traded on the NYSE this day; this represented three times the NYSE daily average for the year and almost twice the record 338 million traded the preceding Friday.

This decline was not limited to blue chip stocks. The over-the-counter ("OTC") market, as measured by the NASDAQ Composite Index, fell by over 11% on volume that exceeded the previous daily average by 48%. American Stock Exchange ("Amex") prices fell over 12% on volume that exceeded the previous single day record by over 65%.

Monday also was an extraordinary day in the stock index futures and stock index options markets. Volume in the S&P 500 futures reached 162,000 contracts, more than double the average daily volume. On the CBOE, restricted trading procedures were instituted for the S&P 100 index option. Volume on October 18 was a below average 323,291 contracts.

The relationship between the stock and futures market on this day also was unprecedented. The principal measure of this relationship is the difference between the price of the futures contract and the level of the actual index. In normal times the future's value is slightly more than the level of the actual index, and discounts, when they appeared, were considered aberrational if they were as high as five points. On the 19th this discount was as low as 20 and consistently was below 6.

### C. Trading Volume and Volatility After October 19

After the NYSE close on Monday, the Nikkei 225 Index declined a record 14%. The decline represented 95% of the maximum the index could fall under the price limits in place on the Tokyo Stock Exchange. The Hong Kong market, which had lost 11% of its value on Monday, closed for the week, and the U.K. markets opened down 9%.

On Tuesday in the U.S., NYSE volume again surpassed 600 million shares. On this day, however, the DJIA rose 102 points, representing a 5.8% increase. The day was marked by volatile swings in the DJIA: the DJIA rose 200 points in the morning and then dropped 227 points before finally climbing 120 points to its 1,841 closing value.

Unlike the DJIA, smaller-capitalized stocks traded on the NYSE continued to decline, with declines outnumbering advances for the day 1,445 to 122. Similarly, the Amex and OTC markets continued to decline on Tuesday, each falling approximately 9% on record volume.

S&P 500 futures volume was 126,000 contracts on this day, twice the previous average daily volume, even though trading was halted for a short period of time at midday. The discount between the price of this contract and the actual S&P 500 Index level consistently was below 15 and reached as low as 45. Trading in S&P 100 options contracts also was halted for a short period of time during the day, and restricted trading procedures were used almost the entire day. The 185,506 contracts volume was again below average.

On Wednesday, October 21, NYSE volume was 449 million shares -- 149% above average -- and the DJIA rose 189 points, another record, or 10%. S&P 500 futures volume was still high, but substantially closer to average at 98,000 contracts. By the close on Wednesday, the DJIA had set absolute price movement records, two positive and two negative, on four consecutive trading days (Friday through Wednesday). The NYSE also had exceeded all previous share volume records on each of these days.

Share volume on Thursday remained high at 392 million. Even on Friday, when New York and the other exchanges initiated a previously announced 2:00 closing, NYSE volume still reached 246 million shares. Volume in the S&P 500 futures subsided substantially on these days, falling to 58,000 and 42,000 contracts but substantial discounts remained. The DJIA dropped 77 points on Thursday, and after intra-day movements, closed on Friday .33 points above its Thursday close. The OTC and the Amex also continued to experience unusually high volume and volatility on these days.

### D. Volume and Volatility Continue the Week of October 26

At 1:00 a.m. New York time on Monday, October 26, the Nikkei 225 closed down 4.3%. At 4:00 a.m. New York time, the FT-SE 100 Index opened down slightly. Although, as planned, the NYSE again closed at 2:00 p.m. on Monday, volume was 309 million shares and the DJIA dropped 156 points, or 8%.

NYSE share volume remained high all week, averaging 281 million even under the shortened hours in effect. Volatility also remained extraordinary, with the DJIA rising 52 points on Tuesday and 91 points on Thursday. For the week, the DJIA gained back 42 points or 2% of its value, closing at 1,993, which was still 743 points and 27% below the August peak and 23% down from October 1.

The OTC and Amex markets also continued to experience high volume, averaging about 202 million and 20.6 million share volume. The NASDAQ Composite Index closed the week down only 5 points at 323, and the Amex closed at exactly the same price at which it closed the previous Friday. The NASDAQ Composite Index was down 27% for the month of October, and the Amex Index was down 25% for this time period.

Foreign markets continued to be volatile. The Nikkei 225 saw movements between 2% and 4% and closed on Friday the 30th 17% below its 1987 peak. The FT-SE 100 Index lost over 6% on Monday the 26th and closed the week down 33% from its 1987 high. All the major indices, foreign and domestic, however, were rising at week's end. The smaller capitalization stocks continued to decline all week, and closed Friday 38% below their September 30th levels.

S&P 500 futures volume was well below previous levels, averaging 34,000 contracts. Premiums between the futures prices and actual index value reappeared, and, while substantial discounts existed, they were less than those seen on the 19th and 20th. S&P 100 index option daily average volume was well below average, at 125,000 contracts.

The average DJIA daily price movement from the October 16 through October 30 was 121 points, more than the previous single day record. There were twelve 100 point and twenty-one 50 point DJIA intra-day price shifts. The total NYSE share volume on these days was over 4 billion, or 11% of total 1986 volume, and the average daily volume of over 367 million exceeded the previous single day record. Total NASDAQ share volume was over 2.2 billion, or a daily average of over 202 million and almost 10% of total 1986 volume. Amex volume was 280 million, a daily average of 25.4 million that surpassed previous single day records.

## III. Commission Action

During the extraordinary market events of October, the Commission expanded its routine monitoring and supervisory functions and engaged in significant decision making activities to respond to the record volume and volatility of the markets. During this period, and continuing up to the present time, the Commission has been in constant communication with the stock

and futures exchanges, the National Association of Securities Dealers ("NASD"), the various clearing agencies, many broker-dealer firms, mutual funds, the Investment Company Institute, and the Securities Investor Protection Corporation. The Commission also has been in constant contact with other governmental agencies, including the Federal Reserve Board, the Comptroller of the Currency, the Department of the Treasury, and the Commodity Futures Trading Commission ("CFTC"). Additionally, the Commission has been actively involved in briefing Senators, Congressmen, and their staffs on a continuing basis as market conditions evolved.

### A. Commission Monitoring and Supervisory Activities

Under the federal securities laws, primary supervision of the operations and trading in the securities markets resides in the self-regulatory organizations -- the exchanges and the NASD -- with active oversight by the Securities and Exchange Commission. [2] Thus, the NYSE, the Amex, the NASD, the CBOE, and the regional stock exchanges maintain systems and procedures to monitor trading and to handle operational problems in their markets (such as order imbalances). Moreover, the markets, in close cooperation with the major clearing corporations, regularly monitor the financial and operational conditions of the brokerage and trading firms.

The Commission's direct monitoring role is more limited. The Commission relies in part on the extensive systems, procedures, and expertise of the self-regulatory organizations ("SROs") to monitor trading and financial health in the securities markets. The Commission performs its oversight function through regular and frequent communication with the SROs and through a program of regular inspections of the various SRO program areas. The Commission also maintains a market surveillance staff in the Divisions of Market Regulation and Enforcement as a further oversight measure.

When markets are more volatile, or suffer significant declines, the staff oversight role increases to provide the Commission with information concerning reasons for the volatility (to assist decision making on regulatory and market issues) and concerning whether firms subject to Commission jurisdiction are in financial or operational difficulty. Because the two weeks preceding the October 19 market decline were periods of both increased volatility and market price erosion, the staff had already stepped up its market oversight.

For example, following the October 6, 1987 drop in the market, the Commission immediately contacted the NYSE and the

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[2] See, e.g. Sections 6(b)(2) and 15A(b)(2) of the Securities Exchange Act.

CFTC to initiate a review of trading activity on that day. In addition, the Commission staff interviewed market participants to determine who engaged in trading that day, for what purpose, and in what amounts. The Commission also requested the NYSE to supply trading data that would allow reconstruction of the events of the day. The actions that we took in response to the October 6 decline were subsequently repeated for October 14, 15, and 16, in response to the precipitous drops in the DJIA on those days. Beginning October 14, Commission staff also began to canvas the various SROs concerning the financial condition of the broker-dealers that they examine. At that time the SROs advised the Commission that their firms were not experiencing any financial difficulties.

Because of the significant declines that occurred during the week of October 12, 1987, and in particular the then-record 108 point decline in the DJIA on Friday, October 16, 1987, preparation was begun over the weekend for possible disruptions in Monday's markets. For example, at my request, senior staff of the Division of Market Regulation held weekend discussions to plan for market monitoring on Monday, October 19; previously scheduled business travel was postponed to ensure adequate senior staff supervision of market conditions on Monday; and the Commission arranged with the NYSE to receive pre-opening indications for major stocks on Monday morning to get a sense of market conditions in advance of the opening. This last procedure had been used previously in unusual market environments -- such as in connection with monitoring the recent "Expiration Friday" trading.

As previously noted, on October 19 the Commission received indications of steep price declines in Tokyo and London prior to the opening on the NYSE. In addition, the Commission received indications from the NYSE of significant order imbalances on the sell side -- indicating a significant market decline at the opening. The Commission requested the NYSE surveillance department to keep it informed on an on-going basis of any operational problems at the Exchange. The Commission also requested information on specialist positions and up-dates on order imbalances. Immediately after the opening, I spoke with John Phelan, Chairman of the NYSE, and was briefed as to the size of sell order imbalances that morning. In response to the early sell-off, Commission staff, using in-house automated market information systems, began to monitor the securities and futures markets minute-by-minute.

Throughout the day, and continually, day-by-day, for the next two weeks, Commission staff, working in specialized teams, kept in close contact with the stock exchanges, options markets, clearing agencies, major broker-dealers, and order-routing firms. The Commission monitored the operation of each markets' order entry and automatic execution systems; the operation of the NASDAQ computerized quote system; the capacity of the major

stock and options clearing operations to process a record number of transactions; the financial condition of broker-dealers and clearing agencies; and the capacity of order-routing firms to handle unprecedented volume. 3/ The staff also responded to numerous questions from market participants, including issuers, investors and members of the securities bar.

The Commission also monitored, through its Division of Investment Management, the effects of market activity on the investment company industry. Division staff in Washington and SEC regional office staff contacted fund and fund transfer agents in their regions by phone or visit. In addition, the Investment Company Institute ("ICI"), the trade group for the mutual fund industry, was asked to survey their members and to report to the staff. These monitoring efforts focused on the level of mutual fund shareholder inquiries and redemption requests, as well as funds' capacity to keep up with the extra paperwork generated by the crisis and to price their shares on a timely basis.

### B. Commission Consultation and Decision Making Activities

In addition to these monitoring functions, the Commission played a primary role in consultation with the NYSE, other major securities exchanges, the NASD, and the CFTC and other governmental agencies, in making certain key decisions throughout the weeks of October 19 and October 26. These significant activities related to, among other matters, curtailing program trading on the NYSE; the NYSE's order imbalance problems on the 20th; early closing of the exchanges; assuring financial viability of certain specialists; the liquidity problems of options market-making clearing firms; increasing margin requirements on stock index options contracts; clarifying interpretive questions relating to the acquisition by corporations of their stock; and dealing with problems raised in the area of mutual fund regulation.

### (1) NYSE Limitations on Program Trading

The Commission was consulted and supported the NYSE's decision on October 20 to preclude member firms from using the NYSE's LIST order routing system to effect index arbitrage transactions. The NYSE's initiative was critical to ensure that the

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3/ On October 20, 1987, Commission staff conducted on-site exams of a service vendor which had reported delays in public customer order executions due to increased volume. The operational problems experienced by the vendor were generally resolved by the following day. The Commission has requested that the vendor submit a report to the Commission detailing the causes and extent of the problem.

NYSE's automated order routing system did not become more overloaded. Through this action, the NYSE averted potentially long delays in the execution of public investors' orders. Similarly, the Commission supported the NYSE's decision, on Thursday, October 22, to request that member firms voluntarily agree not to execute proprietary index arbitrage orders. Index arbitrage plays an important role in ensuring a proper price relationship between the index future and the securities composing the index. In times of extraordinary volatility, however, that arbitrage may cause further sell pressure in the stock market. Following the NYSE's decision, the Commission canvassed a wide range of institutional investors regarding their compliance with the NYSE's request.

### (2) The NYSE's Order Imbalance Problems on the 20th

The Commission also was consulted by the NYSE on October 20 about the possibility of calling a temporary trading halt on the NYSE. The Commission discussed in detail with the NYSE the ramifications of implementing such a decision. At that time (mid-day on the 20th), trading in over 90 securities had been halted on the NYSE because of order imbalances. While temporary cessation of trading should be viewed as an extraordinary measure, serious consideration was given to this option. The enormous positions accumulated by specialists to provide liquidity on Monday the 19th and during the previous week would have placed them at extreme financial risk if the onslaught of sell orders had continued. Fortunately, the rebound in buy orders averted the need for any trading halt at that time.

### (3) Early Closings

The Commission also participated in the decision made by the NYSE to close its market early from October 23 to November 6 in order to process and resolve unmatched trades that had accumulated due to the dramatic increase in the number of transactions executed during this period. While the number of uncompared trades doubled during the highest volume days, the industry has succeeded in resolving the vast majority of those trades through reduced trading hours and increased working hours. The reduced trading hours have been critical to the accomplishment of this formidable task.

### (4) Aquisition of Specialist Firms

The financial condition of the specialists on the floor of the NYSE continued to be a major concern of both the NYSE and the Commission throughout the week of October 19. Accordingly, the Commission took steps to facilitate the acquisition of trading firms experiencing financial difficulty, including specialists units, by well-capitalized institutions. On October 22 the

Commission approved, on an accelerated basis, an amendment to NYSE Rule 98 to ease the restrictions on acquisitions of specialists by retail broker-dealer firms that act as managing underwriters in the stocks in which the specialist makes a market. The rule amendment was designed, in part, to facilitate the acquisition by Merrill Lynch of A.B. Tompane Securities, a NYSE specialist firm experiencing financial distress. 4/

### (5) Options Market Makers Clearing Firms Liquidity

In addition, the Commission played an active role concerning the financial position of options market making clearing firms. Because of the role of these market makers in providing liquidity, certain of these firms experienced financial difficulty. The Commission worked closely with the Options Clearing Corporation ("OCC") and the Chicago Board Options Exchange in ensuring that these firms reduced their positions and increased cash liquidity. In addition, the Commission approved an emergency rule change filed by OCC to ease liquidity concerns at one major firm by recognizing valuable put options positions held by that firm for margin purposes.

### (6) Index Options Margin Increase

Last week, the Commission consulted with the options exchanges regarding their decision to increase the margin requirements for all stock index option contracts. The seller of an index option now will be required to make an initial cash outlay of the premium received for writing the contract, plus 10% of the contract value. This represents a doubling of the margin requirement in effect prior to October 19. This increase will help to ensure that options margin levels more closely reflect the market risks associated with higher volatility.

### (7) Issuer Repurchases

The Commission also took steps to encourage corporate repurchase activity. The Commission counseled a number of issuers and broker-dealers concerning issuer repurchases. The Commission advised those persons that issuer repurchases could either be made pursuant to the safe harbor provisions of Exchange

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4/ Throughout this period of extraordinary price volatility, all major firms remained in compliance with the Commission's regulatory capital requirements. Some smaller firms, however, experienced financial difficulty. Specifically, as of October 30, 1987, 41 firms temporarily ceased doing business or have been required to be liquidated by the Securities Investor Protection Corporation ("SIPC").

Act Rule 10b-18 or outside the Rule so long as the issuer did not engage in manipulative practices or purchase at artificial prices. A large number of issuers in fact made or announced stock market purchases, which significantly added to the liquidity and stability of these securities.

### (8) Mutual Fund Regulation

The Commission also addressed a series of issues related to mutual funds caused by the extraordinary market events. As an initial matter, early in the week of October 19 funds experienced delays in getting closing price data for securities traded on the NYSE and other major U.S. markets. This caused a number of funds to miss the press deadline established by the AP and the UPI for getting their share prices into the mutual fund share price tables that are normally published in major newspapers throughout the country. While the Commission staff, through the NASD, requested and obtained a 1/2 hour extension of the press deadline for October 19 and 20th, there were still many blanks in the fund share price tables published in the morning newspapers.

Another problem arose for establishing net asset value for mutual funds when the NYSE and other markets decided to close early. Many funds moved the time for pricing their shares up two hours to be consistent with the change in hours of the stock exchanges and NASDAQ. The SEC staff advised funds that it had no objection to this change, provided that a similar change was made in the cut-off time for receipt of shareholder purchase and redemption orders at that day's price.

A further problem was created for funds invested in securities traded in Hong Kong when the Hong Kong Stock Exchange was closed for the week after October 19. A handful of funds investing in securities traded in Hong Kong sought and obtained a no action position from the Commission if they determined to suspend redemptions for up to 48 hours because of difficulty in pricing portfolio securities and computing net asset values while the Hong Kong Stock Exchange remained closed. (Pursuant to SEC rules, those no action letters are not yet public.) Most funds with limited investments in Hong Kong-traded securities continued to price and compute net asset value.

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In sum, the Commission has been, and continues to be, actively involved, in both a consultative and oversight role, in three major areas, among others. First, the Commission has worked to maintain the operational capacity of the trading systems and mutual funds. Second, the Commission has acted to

ensure the financial integrity of broker-dealer firms. And third, the Commission has been involved in short term steps to reduce market volatility.

## IV. Methodology of the Commission's Study

As I indicated, I have directed the Commission's staff to study the market events of the past few weeks. In particular, I have asked the staff to investigate causes and effects of extreme volatility. Price volatility on the scale of the last three weeks discourages public investors from participating in the securities markets and threatens the financial stability of the intermediaries that provide necessary liquidity to the markets. Concurrent with our own study we have also established assistance to the Brady Task Force appointed by President Reagan as a high priority.

The Commission's study of the October market crisis encompasses several distinct areas of review covering the securities and derivative markets. I will briefly outline the subject areas and methodology for the Commission's study and the key questions I believe must be answered.

### A. The Role of Index-Related Trading

The Commission's study will review the role played by the various forms of trading involving stock index options and stock index futures and the stocks comprising these indexes -- so-called "program" or "computerized" trading. The Commission's review of this area has two principal objectives. First, we must reconstruct in detail both the magnitude and timing of the various forms of index-related trading -- including index arbitrage or substitution, dynamic hedging or so-called "portfolio insurance," and programed trading of "baskets" of stocks. 5/ This reconstruction will

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5/ Detailed descriptions of these index-related trading strategies are provided in the public report by the Commission's Division of Market Regulation entitled The Role of Index-Related Trading in the Market Decline on September 11 and 12, 1986, at 3-6 (March 1987) ("September 1986 Study"). Definitions of index arbitrage and portfolio insurance are provided in the glossary attached to this testimony (Appendix I). Briefly, index arbitrage involves effecting trades in the stock and stock index derivative markets to take advantage of pricing discrepancies between the two markets. Portfolio insurance involves selling and buying stock index futures at certain market declines and increases to ensure a minimum percent-of-the-market return for a broad portfolio over time.

permit an analysis of the impact of each of these trading strategies and how they interacted with other forms of trading and investor sentiment immediately prior to, and during the market break.

In order to develop the market reconstructions necessary to answer these questions, the Commission and the CFTC are coordinating the collection of data from the principal firms active in index-related trading. This process is being supplemented with analyses of audit trail data from the securities and futures markets and interviews with a wide range of key market participants, including "floor" and "upstairs" traders, market makers and specialists in the stock and derivative markets, mutual fund managers, and other institutional investors.

The Commission has been concerned since the market decline of September 11 and 12, 1986 with the impact of index-related trading on the volatility of the nation's securities markets. 7/ Commission staff have performed detailed analyses of the September 1986 market decline and the price volatility experienced on January 23, 1987 6/ and, as previously noted, was in the process of analyzing the 91.5 point drop in the Dow on October 6 when the latest market break occurred. The Commission staff has conducted these reviews with the active assistance and participation of staff at the CFTC and the SROs, and sharing of surveillance information on index-related trading continue on a regular, on-going basis. In addition, the Commission staff has worked with the CFTC and securities and futures exchanges to implement new procedures to minimize the impact of index-related trading on quarterly expirations for index futures, index options, and equity options -- so-called "Triple Witching Fridays."

The staff's previous studies of the market volatility on September 11 and 12, 1986 and January 23, 1987 found that, while index-related trading could not be established as causing this volatility, the rapidity with which programmed orders could affect prices in dozens of bellwether stocks clearly accelerated market movements. At the same time, however, the use of index products had some substantial economic benefits including providing institutional investors with a less expensive and more efficient means to hedge or adjust their market portfolio. Therefore, the Commission staff concluded that any regulatory

responses must be carefully crafted. The studies also concluded that, while most market participants considered the possibility of index strategies working together to fuel a market meltdown or "cascade scenario" to be remote, the potential impact on the securities markets could not be ignored. As a result, the Commission's monitoring of index trading had to be maintained and expanded.

The Commission's current market study will determine whether, as in the market decline of September 11 and 12, 1986, index-related trading primarily acted to accelerate the transmission of changed investor perceptions to individual stock prices (condensing the time period for a broad market decline), 8/ or if a particular combination of index trading strategies precipitated or exacerbated the market break. The second principal objective of the current Commission study is to use the market reconstruction to re-evaluate the benefits and regulatory implications of the use of derivative index products in the current market structure. Specifically, the study will address a number of significant questions:

First, has the ability for institutions to use stock index futures and options to adjust positions quickly, with relatively low margin costs, encouraged those institutions to increase their equity positions to the point that they must make "hair trigger" selling decisions as the market moves downward?

Second, when, as was the case on October 19, the futures markets remain at a large discount to cash index, no matter what the arbitrage activity, does index arbitrage exacerbate downward price volatility in the stock?

Third, does the fact that the futures market remains at a substantial discount to the cash index during a downward price surge discourage buying interest in the stock market?

Fourth, does the ability to take the equivalent of a very large stock position, through futures or options, while making only a relatively small initial margin payment, result in unacceptable levels of speculative activity in the markets? 9/

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6/ The Commission previously made its non-public report on January 23, 1987 available to its Congressional Oversight Committees.

7/ In my first major speech as Chairman, I spoke about derivative index trading and identified as a major concern the volatility associated with such trading.

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8/ See September 1986 Study, at 2-3.

9/ It should be noted that the Commission's earlier studies did not find evidence that speculative activity in futures and options was a significant contribution to the market volatility.

Fifth, is greater or more formal coordination between the Commission, the CFTC and other interested regulators needed during times of extreme volatility?

### B. Market-Making Capacity

The Commission worked with the NYSE during the October market break to monitor the financial position of the Exchange's specialists and their capacity to maintain fair and orderly markets in their assigned securities in the face of extreme market volatility. While most specialists maintained adequate capital reserves, and, overall, did a reasonably good job of handling staggering order imbalances, the Commission was extremely concerned, immediately after October 19, that another steep decline could cause serious financial difficulties for many specialist units and overwhelm the NYSE's market-making capacity. Moreover, each of the four basic types of market-making systems in the securities markets ("specialists," "competitive market makers," "upstairs market makers" and "competing dealers") experienced severe strains during the market break.

Because of these concerns, the Commission's market study will include a broad overview of the market-making capacity of our securities markets. The Commission is analyzing quotation spreads, price continuity, and market depth statistics for each system, and has staff teams interviewing specialists, market-makers, and other market participants nationwide, to determine whether regulatory initiatives are required. These initiatives might include reducing barriers to mergers of firms, as well as increasing the capital and margin requirements for market makers and their clearing firms.

### C. Financial Integrity

The financial regulatory safeguards implemented by the Commission and the SROs are intended to minimize overexposure of broker-dealer financial positions and to protect customer positions. These safeguards proved their merit over the last few weeks. To date, all major securities firms remain in a strong capital position. Nevertheless, a number of smaller firms have had to cease doing business because of firm losses or customer defaults. While no regulatory system can guarantee that such problems will never occur, our market study will analyze the experience of the last few weeks to determine whether the Commission's already strong financial integrity regulations should be made even stronger. In particular, we will examine whether further limitations should be placed on the degree to which a firm can expose itself to one particular form of market risk (so-called "concentration" tests).

### D. Operational Capacity

The securities markets' operational capacity for trading and clearance functions has handled the extraordinary trading volume of the last few weeks remarkably well. However, there were clearly substantial delays in executing many customer orders as a result of overloading of firm and market order-routing systems. 10/ Similarly, the number of uncompared or problem trades at one point essentially doubled. Although in percentage terms prior weeks' levels were still low and below historical levels, the absolute numbers of trades affected and the dollar amounts were extremely large. While the various markets and clearing organizations have taken appropriate short-term remedial actions, such as reduced trading hours and overtime work by opertional staff, the Commission believes that the recent extraordinary volatility underlines the need to accelerate the expansion of the markets' overall operational capacity. We will lay the groundwork for this effort with a critical analysis of the system strains as highlighted by the October market break.

### E. Internationalization Concerns

The extent of a causal relationship between the recent price volatility on this nation's securities markets and that occurring on foreign markets such as Tokyo, London, Sydney, and Hong Kong must also be examined. The activity of the last few weeks only heightens the Commission's existing concerns about the evolving interconnections among the world's securities markets. In addition, our study will seek to determine the extent to which foreign capital was transferred out of our stock markets during the market break.

## V. Responses to Committee's Questions

The following are some of my preliminary observations in response to the questions contained in the Committee's October 27 letter. As indicated in our responses, we will be analyzing many of these questions in more detail in our study.

### Question No. 1

What economic fundamentals changed on or around October 19th that could explain the size of the stock market decline?

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10/ One question that will be studied is whether unregulated entities that provide order handling and back office services to market participants should be regulated.

There have been numerous opinions reported in the media and elsewhere concerning what factors triggered the market's dramatic decline. Factors of a broad economic nature that have been suggested include investor anxiety concerning the United States involvement in the Persian Gulf; concern about the possible devaluation of the dollar; higher interest rates and higher inflation; and expectation of a world-wide recession. In addition, much attention has been paid by the media and others to the possible influence on the market of the continuing budget and trade deficits and possible tax changes regarding takeovers.

Question No. 2

Did computer trading arbitrage techniques and portfolio insurance cause, deepen and/or speed the decline in stock?

This question is one of the key issues that must be resolved by the Commission's current market study. As discussed earlier, we are currently analyzing preliminary trading data and are compiling, in coordination with the CFTC, detailed program-by-program data from the major firms active in index-trading strategies.

The preliminary information we have received does suggest that both index arbitrage and portfolio insurance activity were significant during the market downturn. Our preliminary information indicates that on October 19 firms may have engaged in arbitrage activity (among other strategies) resulting in the sale of up to fifth-five million shares of stock on the NYSE, approximately 10% of total volume on that day. Similarly, a large number of arbitrage programs apparently were executed during the last hour and a half of trading on Friday, October 16, when the market turned down sharply. In addition, our initial interviews with major firms suggest that institutions employing futures in portfolio insurance strategies accounted for a substantial percentage of futures volume on October 19 and 20, exceeding 24% and 15% of total volume in the S&P 500 futures contract these days, respectively.

Definitive conclusions adverse to index arbitrage and portfolio insurance activity should not be drawn from this preliminary data. While portfolio insurance selling may have been significant, an argument can be made that without the availability of the futures markets all of this sell activity would have been funneled directly to the stock market. Similarly, index arbitrage is critical to ensure that futures prices remain in line with stock prices.

The Commission is making the prompt completion of the detailed market reconstruction a high priority in order to make more definitive findings on the role of index-related trading on the October market break, and to convey these findings to Congress as soon as possible.

Question No. 3

What improvements may be necessary in the clearance and settlement system?

Processing went smoothly at the clearing agencies during the recent period of extremely high volume. We understand from the National Securities Clearing Corporation ("NSCC"), the largest registered clearing corporation, that substantially all transactions executed on the highest volume days, October 19 and 20, settled automatically on the usual settlement date, which is the fifth business day after trade execution. Similarly, Depository Trust Company ("DTC"), the largest registered securities depository, reported to us that the affirmation rate for its Institutional Delivery System remained at the normal level despite a range of nearly double to more than double normal volume during the week of October 19.

Discussions with clearing firms revealed several types of problems. Traders often were uncertain whether orders were executed, especially on the busiest days, October 19 and 20, and therefore may have reported trade data more than once. In addition, pricing problems led to unmatched trade data reported by the parties. These unmatched reports, coupled with high volume, resulted in uncompared rates on the day after trade date (T+1) for NYSE and Amex activity of 2.1% to 3.4% during the week of October 19, compared with a normal T+1 uncompared rate of 1.7%. The increased number of questioned trades ("QTs") meant long hours on the Exchange floor by traders working to resolve the differences. We intend to explore with industry officials the feasibility of "locking in" both parties to a trade while they are on the Exchange floor, thus substantially eliminating comparison problems. Trades sent through the NYSE's automated systems already are compared on the floor. If floor-derived comparison was expanded it would greatly increase the NYSE's ability to handle high volume days more efficiently.

Similarly, QT rates in the NASDAQ market on October 19 and 20 were substantially higher than normal. The Commission intends to encourage the NASD to accelerate their planned development of a system that would permit firms to compare trades at the time of execution.

Conversations with clearing firms also revealed that some firms' automated systems are designed to handle routine trade volume no greater than 250 million to 300 million share days. Volume greater than 400 million shares created processing stresses for many of these firms. Should extremely high volume continue on a sustained basis, systems upgrades and expansions will be required.

We are continuing to assess clearance and settlement systems to identify manually-intensive aspects, such as QT resolution, that impede smooth processing. In particular, we intend to examine closely the adequacy of certificate handling by broker-dealers, clearing agencies, and transfer agents. Preliminary reports from these entities indicate that the volume of certificates being processed is well above normal. We intend to examine brokers' response to customers' requests for certificates, tracking carefully how long brokers hold certificates before turning them over to depositories and transfer agents for processing. We also intend to monitor closely transfer agents' turnaround performance during this high volume period.

Question No. 4

> Did the margin requirements in the markets for derivative instruments, which are significantly below those required for purchasing common stocks, exacerbate the stock market's decline? Would it be advisable to institute higher margin requirements and stricter position limits in these markets after the crisis subsides?

While it is not clear what role derivative product trading played in recent market volatility, the Commission will examine the effects, if any, of the ability of a stock index futures or options purchaser or seller to control a very large dollar-equivalent stock position with a minimal initial margin payment. For example, before October 19, a hedged purchaser or seller of a S&P 500 Stock Index futures contract trading at an index value of 300 was able to acquire (or sell) approximately $150,000 worth of stock for an initial margin payment of $5,000, or only 3% of the contract's value. A seller of an index option was required to put down the premium received plus 5% of the contract value.

Accordingly, the Commission will reexamine the assumptions underlying index options and futures margin levels and the effects of the leveraging capabilities associated with current margin levels. Index futures margin levels, which are set by the individual futures exchanges, have been raised in response to recent events. In addition, the Commission earlier this week approved an increase of index option margin to premium plus 10% of the contract value. The Commission will actively consider

whether even higher margin levels for index options and futures would bring these products more in line with stock margin levels while helping to reduce the leveraging that may be associated with derivative product trading.

The Commission also is examining the adequacy of the position limits applicable to index products. Index option position limits are set by the options exchanges subject to SEC approval and generally are 25,000 contracts on the same side of the market for hedgers and speculators. Index futures position limits generally are set by the futures exchanges and range from 4,000 to 8,000 contracts for speculators (futures contracts generally are five times larger than options contracts). There are no position limits for hedged stock index futures positions. As part of its study, the Commission will consider the appropriateness of these position limits as well as whether an aggregate, across-the-board position limits for all index products should be developed.

Question No. 5

> Does the performance of the specialist system used by exchanges compare favorably with dealer systems used on the overthe-counter market? Did the crash affect the two types of market making differently? How were small investors served relative to the large investors by these two systems of market making? Is the capital of the specialists adequate?

As indicated above, the Commission's analysis of the recent market break will consider the performance of market making functions across all markets as well as the capital available to perform those functions and the operational capacity of individual markets to absorb unexpected increases in trading volume. In addition, the Commission will consider how small orders, versus large orders, were handled by the respective markets.

As a preliminary matter, during periods of extreme downward market volatility there often are no buyers [illegible] the market. Accordingly specialists, because of market obligations, have few alternatives other than to continue trading at ever declining prices. As a result, in a rapidly declining market specialists may be placed in substantial risk positions which, if the market continues downward, could jeopardize their capital capability unless other sources of buying interest come into the market (*e.g.*, corporate repurchase programs, institutional purchasers and/or upstairs market making firms). The Commission will examine whether there are procedures or policies that could be instituted to bring more buy-side capital into the market more rapidly in such situations. The Commission also will examine whether higher capital requirements for specialists and perhaps mergers with well-capitalized investment firms should be encouraged.

The issues relating to OTC market making capital are similar: a market maker only can be expected to commit so much capital to acquire an inventory of stock in a declining market. At least in two respects, however, the OTC market does differ from the exchange market. First, because the OTC market depends on individual market makers to update their quotations, if those market makers are physically unable to update their quotes in a timely manner or decline to update their quotes, the integrity of the NASDAQ System to perform its pricing functions may be impaired. In turn, if the NASDAQ quotes are unreliable, firms faced with increasing volume may be forced to rely on more manually intensive methods of pricing securities and executing orders. Second, if, as appears to be the case here, investors sell their OTC securities in order to meet margin calls on listed stocks, there may be a delayed effect in the OTC market and greater cumulative selling pressure in that market. The Commission understands that the NASD is currently examining these and related issues.

Question No. 6

> What were the reasons for the prolonged interruption of trading in the Hong Kong market last week? Are domestic securities markets disrupted by malfunctions or protracted interruptions in foreign markets?

The Hong Kong market was closed for much of the week of October 19, apparently due to unprecedented futures and stock sell order imbalances and the perceived inability of many market participants to survive in the face of panic selling. The Commission, as part of its study of recent market activity, will examine trading on several foreign exchanges. One of the areas we will be studying is the impact of overseas market developments on domestic securities markets. While it is too early to say definitively, we do not believe that the interruption of trading in Hong Kong had a significant impact on U.S. market activity as a whole.

Question No. 7

> Would it be advantageous to have all regulation of securities-related instruments focused in the Securities and Exchange Commission?

The Commission has an effective working relationship with the CFTC. In addition, the various SROs -- both futures and securities -- regularly share surveillance information with one another and work together on matters of mutual concern. Indeed, we have been in close contact with the CFTC and the CME throughout the market break. Accordingly, it would be premature to speculate on whether a unified regulatory structure for securities-related products is necessary at this time.

At the same time, however, it is clear that the recent crisis has highlighted the interrelationships between the stock and derivative markets. Therefore, we plan to revisit whether the assumptions that underlay the jurisdictional Accord between the SEC and CFTC in 1982 remain valid today. Moreover, the consideration of the regulatory steps needed in response to the market break must recognize the need to address the relationships between the derivative and stock markets in a unified manner. Thus, the Commission, in its analysis of the recent market developments, will consider not only what changes, if any, are appropriate for the securities markets but also what, if any, changes may be necessary in the derivative markets.

Question No. 8

> Have the OTC, and other indices of market behavior performed significantly differently than the Dow Jones Average since Monday, October 19th? Does this suggest that there has been widespread support of the Blue Chip firms by Wall Street in an attempt to arrest the panic psychology?

While, as described earlier, the price movements of the indices have varied on a day-to-day basis, the October market break has been broad-based, affecting all markets. The degree to which particular markets experience price movements is determined by a number of factors, including the capitalization of the issuers of the market's securities, the level of investment by institutional versus individual investors, and varying market structures. In addition, in reaction to the October market break, a number of well capitalized issuers, including issuers of a number of "Blue Chip" NYSE stocks, have announced stock buy-backs which tend to mitigate downward price movements in their securities.

VI. Conclusion

During the past weeks, we experienced a market-wide sell-off, accompanied by unprecedented volume. These events tested the capacities of the markets' trading systems, personnel, and settlement operations. I believe the systems and the industry handled this crisis quite well under the circumstances. While there have been isolated firm failures and temporary operational difficulties, on balance the industry remains strong and the markets' systems continue to operate effectively.

Nevertheless, we have witnessed the most dramatic, volatile market decline since the SEC was formed. Unraveling and analyzing the events of the past weeks is my first priority. I remain committed to determine what course of action should be taken to ensure the continued financial soundness of the securities industry and the protection of investors. As I outlined, the Commission's study will respond to the questions of the Committee that were submitted to the Commission last week. I believe that the facts and analysis derived from this study as well as the ongoing study of the Brady Task Force will be instrumental to address the causes of the stock market decline and any appropriate regulatory or legislative action.

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## Appendix I

## Options and Futures Trading Primer

### A. Glossary

The following definitions describe the characteristics of futures and options contracts.

1. Option -- An option is a legal contract that provides the buyer or holder the right to buy or sell a specified amount of the underlying interest at a fixed price (called the exercise or strike price) for a limited period of time. The buyer of an option pays a premium to the option seller for the rights conveyed by the option. If an option is exercised by the holder of the option, it is assigned to an option seller or writer who is obligated to perform according to the contract terms. Option contracts are of two general types: a call option conveys the right, but not the obligation, to buy the underlying interest; a put option conveys the right, but not the obligation, to sell the underlying interest. Instead of exercising an option, a buyer (or seller) can close out his position by selling (or buying) the option in the secondary market. All options that are traded on exchanges are called Standardized Options. The Options Clearing Corporation is both the issuer of all standardized options, and a nominal intermediary between the buyer and seller of these options.

2. Stock Option -- A stock option is a contract that provides the buyer the right to buy or sell a specified quantity of a particular stock (usually 100 shares) at a determinable price at or before expiration of the option. When a buyer exercises the stock option, the option seller must settle the exercise by the delivery or purchase of stock.

3. Index -- An index is a measure of the value of a group of stocks or other interests. Stock index values generally are calculated in two ways: weighted by capital or weighted by price. In a capitalization-weighted index, generally the capitalizations (total dollar value of shares outstanding at the current market price) of all stocks in the index are computed and added together to produce the total market value of the index. This total sum is divided by a divisor to produce the final index value. A price-weighted index contains an equal number of shares of each stock in the index. The index value generally is computed by adding together the prices of the various stocks in the index and then dividing that sum by a divisor.

4. Cash Settled Index Option -- A cash-settled index option is a contract that provides the holder the right, on exercising the option, to receive cash equal to the difference between the index's exercise settlement value and the exercise price of the option. In simplified terms, assume a price-weighted index whose value is 200. An investor might pay $20 for a call option with an index strike price of 250. Such a call would entitle the investor to gain a dollar for each point the index value exceeds 250. For example, assume that on expiration date the index's value is 300. If the investor exercised his call he would receive $50 [i.e. 300 (the index settlement value) minus 250 (the index exercise price) times $1.00.] for a profit of $30 (i.e., $50 minus the purchase price of $20.

5. Futures -- A commodities futures contract is an unconditional obligation to make or take delivery of a specified quantity of a commodity at a specific time in the future for a specific price. Unlike options, under a futures contract both parties are obligated to perform in accordance with the contract terms. Like options, however, a party can close out his position through an offsetting transaction. Futures contracts encompass conventional types of commodities, such as grains, meats, and metals, as well as financial investments such as Treasury bonds, bills, and notes. Recently, futures contracts have been issued that are cash-settled: the contract settles for cash and no actual commodity is delivered. These cash-based futures contracts have indexes as ther underlying "commodity."

6. Index Futures -- An index futures contract is an agreement between a buyer and a seller to make a cash settlement upon the expiration of the contract based upon the futures price at that time.

7. Index Futures Option -- An index futures option is a contract that conveys the right, but not the obligation, to take or make delivery of an index futures contract.

8. Index Arbitrage -- Index arbitrage is the simultaneous purchase (or aale) of stocks that comprise or closely track a stock index and the sale (or purchase) of either futures or options on that particular index. Index arbitrageurs take advantage of spreads that periodically open up between equities, futures, and options markets by buying in the lowest-priced market and selling in the highest-priced market.

9. Portfolio Insurance -- Portfolio insurance is a hedging strategy designed to control market risk for a broad based portfolio by selling and buying stock index derivative products to protect against market loss at a cost of some limitation on the opportunities for appreciation. Typically, portfolio insurance seeks to assure a minimum value for a portfolio over a specified time period. To achieve this, stock index futures are sold when the value of the portfolio decreases a certain percentage, and are repurchased when the portfolio regains this loss.

## B. Options and Futures Strategies

The following examples are provided to illustrate the use of index options and futures, as well as the margin required for these trades.

1. Sale of a S&P 500 future. -- Assume that on October 1, 1987, the S&P 500 future was trading at 250. On that day an investor might sell (or buy) one futures contracts at 250. The sale or purchase of a futures contract requires a margin deposit that can be drawn upon to cover any losses incurred in the course of futures trading. Prior to the week of October 19, the initial margin payment that the investor must deposit in order tm sell (or buy) this contract, which represents approximately $125,000 worth of stock, would have been $10,000 or 8% of the contract value (or only $5,000 if the purchase qualified as a bona fide hedging transaction). After October 19, the amount of initial margin required was raised. Today an investor who wanted to sell (or buy) in a non-hedging transaction, one S&P 500 future trading at 250 would have to deposit $20,000 or 16% of the contract value (or $15,000 and 12% if a hedger). The seller also would have to "mark the position to market" each day by depositing the amount of any daily losses.

2. Sale of a S&P 500 option. -- Assume that on October 1, 1987, the S&P 500 index value was 250, which means the option contract value would be $25,000. On that day an investor might sell a call exercisable at 250 for a premium of 3-1/2. A margin deposit will be required when an option is sold; option purchasers are not required to deposit margin. Option margin deposits serve as collateral for the option seller's obligation to pay the cash settlement price, if assigned an exercise. Prior to the week of October 19, the option seller would be required to deposit margin in the amount of $1,600 or 5% of the index value ($1,250) plus the call premium received ($350). This margin deposit represents 6.4% of the contract value. Shortly after October 19, index option margin was increased, so that a deposit of $2,850 would now be required to sell the S&P 250 call at 3-1/2, or 10% of the index value ($2,500) plus the call premium received. This increased margin deposit represents 11.4% of the contract value.

3. Index Arbitrage. Assume that on November 1, the S&P 500 future is trading at 250 and the composite value of the stocks underlying the index is 248. On that day an investor might sell the future at 250 and buy the basket of underlying stocks at 248, capturing the two point spread. The investor would be required to deposit initial margin of $20,000 in order to sell the future, which represents $125,000 worth of stock. Or, assuming the position qualified as a bona fide hedging transaction under the CFTC's rules, the investor would be required to deposit initial margin of $15,000 to sell the future. The stock purchase would require a 50% margin payment, i.e., the purchase of $125,000 worth of stock would require a minimum down payment of $62,500. When the index future expires, the terms of the futures contract will require that its value be determined by the underlying composite stock values. Therefore, at expiration the spread between the future and the underlying stocks will disappear. If the final index value is 252, the investor could let the future expire at 252 at a loss of two points, and close out the stock position by selling the basket of stocks at 252 at a gain of four points. Accordingly, in closing out these positions, the investor has realized the two point spread captured on November 1. For purposes of simplicity this example ignores transaction costs, the time value of the money not required to be vested in the underlying stocks, and the dividends that would have been received by a holder of the underlying stocks but not by the holder of the futures.

## Appendix II

### SEC/CFTC Regulatory Jurisdiction

The Commodity Futures Trading Commission Act of 1974, which created the Commodity Futures Trading Commission ("CFTC") as an independent agency to administer the Commodity Exchange Act ("CEA"), also amended the definition of "commodity" in the CEA to include all contracts for future delivery involving tangible goods and articles, as well as intangible services, rights and interest. Before this amendment, the term "commodity" in the CEA was limited to certain specifically enumerated agricultural products. The CEA, as amended, provided the CFTC with exclusive jurisdiction not only over futures contracts but also over certain related instruments, such as commodity options. The amendment brought under the CFTC's exclusive jurisdiction previously unregulated commodities such as coffee, gold, and foreign currencies. The amendment also was intended to assure CFTC jursidiction over new futures contracts, such as futures on government-guaranteed, mortgage-backed securities ("GNMAs"), contemplated at the time but not yet traded. A provision preserving the preexisting authority of the Securities and Exchange Commission ("SEC") over securities trading and the securities markets was contained in the CFTC Act. 1/

The broad statutory language in the CFTC Act soon led to a dispute between the SEC and the CFTC as to its intended meaning. In 1975, CFTC approval of a Chicago Board of Trade ("CBT") application for designation as a contract market for the trading of GNMA futures contracts precipitated an exchange of letters between the SEC and the CFTC. The SEC asserted that futures on GNMAs were securities, within the SEC's jurisdiction, and the CFTC responded that these instruments were within the exclusive jurisdiction of the CFTC.

The issue was not resolved, and, in 1978, it became the subject of Congressional attention during the CFTC's reauthorization hearings. SEC Chairman Williams, representatives of the securities industry, and others testified that the SEC's interest in the securities underlying futures contracts, and its more extensive experience in regulating the trading of options, warranted SEC regulation of futures and options on securities

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1/ The amendments to the CEA were adopted in the CFTC Act of 1974, Pub. L. No. 93-463, 88 Stat. 1389 (1974).

instruments. 2/ Others testified in support of amending the grant of exclusive jursidction to the CFTC to limit that jurisdiction to futures on traditional commodities, with the SEC being given jurisdiction over futures and options on securities. 3/ The CFTC and commodities industry representatives stated that the key regulatory distinction was whether the instrument was in fact a futures contract. 4/ The Congressional Committees considering the legislation determined to leave unchanged the jurisdiction of the CFTC to assure the same regulatory scheme for all futures contracts. 5/ The Congress did amend the CEA, however, to require that the CFTC inform and seek the views of the SEC about CFTC activities that relate to the SEC's regulatory responsibilities. 6/ Even with this amendment, however, the securities and commodities laws failed to provide a clear demarcation of the agencies' jurisdictions.

In early 1981, following an SEC order approving a proposal by the CBOE to permit the trading of GNMA option contracts, the Chicago Board of Trade ("CBT") filed a petition in the United States Court of Appeals for the Seventh Circuit asking that the SEC order be set aside on the basis, among other things, that these contracts were commodity option contracts and, hence, were subject to the provisions of the CEA and the regulatory jurisdiction of the CFTC, rather than the securities acts and the SEC. The CBOE subsequently intervened in this action, taking

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2/ See Extend Commodity Exchange Act: Hearings on H.R. 10285 Before the House Subcommittee of Conservation and Credit of the House Committee on Agriculture, 95th Cong., 2d Sess. 189-91 (1978) ("1978 House Hearings").

3/ See Reauthorization of the CFTC: Hearings Before the Subcommittee on Agricultural Research and General Legislation of the Senate Committee on Agriculture, Nutrition and Forestry, 95th Cong., 2d Sess. 467 (1978) (statement of Joseph Sullivan, President, Chicago Board Options Exchange ["CBOE"]) and 1978 House Hearings, at 32-34 (General Accounting Office ("1978 Senate Hearings").

4/ See, e.g., 1978 House Hearings at 55 (testimony of Commissioner John V. Rainbolt II); 1978 Senate Hearings at 171-172 (testimony of Robert H. Wilmouth, President of the CBT.

5/ S. Rep. No. 850, 95th Cong., 2d Sess. 22-23 (1978).

6/ Section 2(a)(8)(B) of the CEA.

the side of the SEC, while the CFTC filed an amicus curiae brief in support of the CBT position. The Seventh Circuit stayed the CBOE from trading GNMA options until it rendered its decision. On March 24, 1982, the Seventh Circuit ruled that the SEC did not have jurisdiction to oversee the trading of option contracts on GNMA certificates and that the CEA governed the contracts, Board of Trade of the City of Chicago v. SEC, 677 F.2d 1137 (7th Cir. 1982).

Under these circumstances, and in an effort to end jurisdictional uncertainty over which agency would regulate specific financial instruments, in October 1981, during the pendency of the litigation, the Chairmen of the SEC and CFTC -- Chairman Shad and Chairman Johnson, respectively -- entered into an agreement (the "Accord") to clarify the respective jurisdictional responsibilities of the agencies. Under the Accord, certain specified instruments would be regulated by the CFTC, while others would be regulated by the SEC.

The SEC, in addition to retaining regulatory authority over securities, would have jurisdiction over options on securities, including exempted securities (such as GNMA certificates); options on a group or index of securities; options on foreign currency traded on a national securities exchange; and options on certificates of deposit. The CFTC, in addition to retaining regulatory authority over futures contracts, would have jurisdiction to regulate futures (and options on futures) on exempted securities 7/ (except municipal securities) traded on a contract market (such as futures on GNMA certificates, on Treasury bonds, notes, and bills, and on certificates of deposit); futures (and options on futures) on "broad-based" groups or indexes of securities; options on foreign currency not traded on a national securities exchange; and options on commodities.

The Accord also established three basic criteria a securities index futures contract (or an option on a futures contract) must meet in order for it to be eligible for trading: (1) the futures contract must be settled in cash; (2) it must not be readily susceptible to manipulation; and (3) the underlying index must be broad-based, i.e., it must reflect the market for all or a substantial segment of publicly traded equity or debt securities or a comparable measure thereof.

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7/ Section 2(a)(1)(B)(v) of the CEA prohibits the trading of futures contracts on individual securities other than exempted securities. In addition, futures contracts on individual municipal securities, even though exempted securities under the Securities Exchange Act of 1934, also are prohibited.

Subsequently, in 1982, the Congress enacted the Accord into law 8/ in substantially the same form as proposed by the two agencies. 9/ The principal addition by the Congress to the Accord was a provision granting the SEC the authority to disapprove a board of trade's application for designation as a contract market to trade futures (or options on futures) on a stock group or index. 10/ The Futures Trading Act of 1982 sets forth a specific regulatory role for the SEC when a board of trade submits a contract market application. The SEC must comment to the CFTC within 45 days after the close of the public comment period on the contract proposal. The CFTC may not approve any contract market application that the SEC has determined fails to meet the three criteria described above.

In reviewing proposed futures contracts based on a group or index of securities, the SEC generally has focused on determining whether the proposed contract is not readily susceptible to manipulation and whether the securities index is broad-based in nature. In determining whether a proposed contract is not readily susceptible to manipulation, the SEC examines, among other things, the following factors: The number of securities comprising the index or group; the capitalization of those securities; the depth and liquidity of the secondary market for those securities; the diversification of the group or index; the manner in which the index or group is weighted; and the existence of a surveillance-sharing agreement or arrangement between the futures market and the underlying cash market or markets. The requirement that the index be broad-based is intended, in part, to ensure that a securities index futures

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8/ The decision of the Seventh Circuit Court of Appeals in Board of Trade of the City of Chicago v. SEC was rendered moot by enaction of this legislation, and was subsequently vacated by the Supreme Court.

9/ The amendments to the securities laws were adopted in the Securities Acts Amendments of 1982, Pub. L. No. 97-303, 96 Stat. 1409 (1982) and the amendments to the commodities laws were adopted in the Futures Trading Act of 1982, Pub. L. No. 97-444, 96 Stat. 2294 (1983).

10/ This authority exists only for applications submitted for approval after December 9, 1982. Prior to this time the CFTC was required to consult with the SEC with regard to any index futures contract application.

contract will not function as a surrogate for trading in individual securities or options on those securities. 11/

## B. Securities Index Futures Products

The SEC has applied the Accord criteria in reviewing and approving more than 20 stock index futures contracts since 1982. Of that number, the following futures contracts are actively traded: the Standard & Poor's 500 Stock Index ("S&P 500") traded on the Chicago Mercantile Exchange ("CME"); the Major Market Index, the Institutional Index, and the Municipal Bond Buyer Index, traded on the Chicago Board of Trade ("CBT"); the New York Stock Exchange Composite Index ("NYSECI") and the Russell Indexes, traded on the New York Futures Exchange ("NYFE"); the Value Line Index, traded on the Kansas City Board of Trade; and the Philadelphia Stock Exchange National Over-the-Counter Index, traded on the Philadelphia Board of Trade. The SEC and the CFTC recently approved two corporate bond indexes that recently began trading: the Long-Term Corporate Bond Index, traded on the CBT, and the Moody's Investment-Grade Corporate Bond Index, traded on the Commodity Exchange. The SEC and the CFTC approved the following actively-traded options on stock index futures contracts: options on futures contracts based on the S&P 500 traded on the CME, and options on futures contracts based on the NYSECI traded on the NYSE.

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11/ Attached is a chart setting forth the major futures and options stock indices, some of their characteristics and the exchanges on which they are traded.

Attachment to Appendix II

Broad Based Stock Index Options, Futures, and Futures Options Products

| Index | Weighted: | Number of Securities | Options Traded On: | Futures Traded On: | Futures Options Traded on: |
|---|---|---|---|---|---|
| S&P 500 | Capitalization | 500 stocks | CBOE | CME* | CME |
| S&P 100 | Capitalization | 100 stocks | CBOE* | — | — |
| Major Market Index | Price | 20 stocks | Amex* | CBT | — |
| Institutional Index | Capitalization | 75 stocks | Amex | CBT | — |
| NYSE Composite Index | Capitalization | All common stocks listed and traded on the NYSE | NYSE | NYFE | NYFE |
| Beta Index | Price | 100 stocks | NYSE | — | — |
| Value Line Index | Price | 1,700 stocks | Phlx | KCBT | KCBT |
| Financial News Composite Index | Price | 30 stocks | PSE | Intex | — |
| Russell 1,000, 2,000 and 3,000 Indexes | Capitalization | 1,000, 2,000 and 3,000 stocks | — | NYFE | — |
| Phlx Over-the-Counter Index | Capitalization | 100 NMS stocks | Phlx | PHBT | — |

* The more active derivative products

The **Chairman**. Thank you, Chairman Ruder, for an excellent statement. I want to thank you also for your prepared statement, which answers a number of questions that the committee asked.

### WARNING ABOUT A "MELTDOWN"

Chairman Ruder, for the last year, the president of the New York Stock Exchange has been warning about the possibility of what he called a "meltdown" in the stock market because of program trading.

By way of contrast, the SEC saw little or no danger. As Mr. Riegle pointed out, Chairman Shad recently said before this committee that the possibility of a 500-point drop in the Dow was extremely remote. It is now evident that the New York Stock Exchange had a much firmer grasp on reality than the SEC.

I don't want to single out Chairman Shad or John Phelan. Obviously, you can't be responsible; you weren't in office when these judgments took place. But I think that their statements seem to reflect the institutions they represent.

What I am interested in is understanding how this difference in perspective came about, how did it happen that the SEC became so out of touch with what was going on in the market compared to the New York Stock Exchange.

Did the Commission allow ideology to distort its view of reality?

Mr. **Ruder**. Sir, as you know, I came to the Commission on August 7, 1987.

The **Chairman**. Yes. As I say, I am not asking you your judgment compared with John Phelan's. I am just saying that the stock exchange itself and the SEC seemed to differ on the possibility of this kind of collapse.

Mr. **Ruder**. All I can do is to recite for you what I learned when I came in. Prior to my confirmation, I was briefed by the staff of the Securities and Exchange Commission, particularly the staff of the Division of Market Regulation, briefings which would allow me to respond to questions here.

I found that our staff was intensely concerned with this volatility problem. They spoke to me about the study that they had done regarding the market events of September 11 and 12, 1986, with regard to volatility.

They also spoke to me about a nonpublic study which has been done about the events of January 23, in which we had 115 points or more of intraday volatility. And they so got into my consciousness with their concern about this.

And they also talked about John Phelan's meltdown theory, and they described it to me in detail and told me what the possibilities were. I talked with them and said, "Well, is this a likely thing?" And they said, "We don't know." My response was, "Well, we better get going on this. We better get going on looking at the volatility problems."

And I can tell you that staff of the Division of Market Regulation has been concerned and has been on top of this. I cannot tell you what the Commission—"Commission"—has had as a view prior to this time.

## IMPACT OF CLOSING THE MARKET

The CHAIRMAN. There has been some comment on your public discussion of possible trading halt on "Black Monday." People say that that frightened some investors into believing that they would have to sell quickly before the market was shut down.

Deciding if and when to close the market, of course, is a judgment call. There can't be any quantitative parameters. But in your view, what are the various factors that would contribute to a decision to halt trading? If you didn't halt it on that day, under what circumstances would you halt trading?

Mr. RUDER. There are essentially two reasons, two times in which one might halt trading. One time would be when there is a temporary order imbalance for reasons that are not very easy to identify, and what you want to do is to allow the market to have a chance to see what the demands are. That is a very temporary, very small kind of trading halt.

The CHAIRMAN. Let me just interrupt to say that my problem is why you as Chairman of the SEC publicly made this discussion. Wouldn't it have been wiser in retrospect—it's always easier in hindsight—to have made up your mind without any prior announcement or to say nothing about shutting it down?

A rumor that you may shut it down, it seems to me, could have and in this case may have contributed to the drop in the market.

Mr. RUDER. There are many things that need discussing more than my impact on the events of the day. But I will say simply that the media did not report my remarks correctly.

The CHAIRMAN. What did you say?

Mr. RUDER. I said that, "A," I had been in contact with John Phelan before I came over to give a speech; and B, in response to a question of what could be done with regard to a volatile market, I said, "Well, one of the things one might do is to have a temporary trading halt, a very, very temporary trading halt," repeating, I may say, statements that I had made in my October 6 statement.

The CHAIRMAN. But in that context, wasn't that a logical interpretation by a reporter? In retrospect, wouldn't it have been wiser for you simply to say nothing about a trading halt?

Mr. RUDER. Yes. Oh, absolutely, yes, sir. I will agree with you it would have been wiser. But under the circumstances, I had been in a speech in the middle of the morning, and I had not been able to observe what was going on in the markets And I came out and was confronted with a bevy of microphones, and I really don't think it was in my consciousness that this was going to be the kind of down-market volatile day.

I would say one other thing that I have learned. Apparently, it was not the financial press that was out there. It was a different kind of press who may not really have been able to understand what I was talking about in this very crucial area.

The CHAIRMAN. Thank you.

Senator Heinz.

I heard chuckles from the press in the back.

Senator HEINZ. That was the networks, Mr. Chairman.

The CHAIRMAN. That was the nonfinancial press.

Senator HEINZ. The nonfinancial press. [Laughter.]

The CHAIRMAN. That was kind of a comfortable chuckle. I think it came from the financial press. They're all for you. [Laughter.]

Mr. RUDER. I am sure I will hear about that remark also. [Laughter.]

The CHAIRMAN. Senator Heinz.

Senator HEINZ. Thank you, Mr. Chairman.

Mr. Ruder, you said some things in your statement a moment ago, and you also didn't say some things—which I am quite fascinated by.

### FINANCIAL INTEGRITY REQUIREMENTS

You discussed financial integrity requirements, but you didn't indicate why you felt there needed to be a careful look at financial integrity requirements. And what made me realize that you hadn't characterized any need is that I gather that as of today firms may still not trade for their own account. Major investment banking houses are still precluded from their own account using, I guess, either the direct-order transfer system or the indexed futures or portfolio insurance, or all three.

Mr. RUDER. May I just answer that question and then you could continue?

Senator HEINZ. Yes.

Mr. RUDER. I spoke with John Phelan this morning about that specific matter. They have removed an oral request that firms not engage in proprietary index arbitrage program trading, so that they are now permitted to do so. As you know, during the last few weeks since October 20, the use of the stock exchanges' automated order system for putting in futures trading, futures program trading, has not been allowed except at the opening. They are allowed to engage in and use the automated system for opening. But during the day it's not allowed, and that still continues.

Senator HEINZ. Now, why are you looking into the financial integrity requirements? Do you have reasons to do so? Do you have reasons to be concerned?

Mr. RUDER. We are looking into everything.

Senator HEINZ. Well, I know you are, but I am asking you a specific question.

Mr. RUDER. We had two specialist firms on the Amex and two specialist firms on the New York Stock Exchange that ceased doing business during the events of last week. The major one was acquired by Merrill Lynch under a standby system which the New York Stock Exchange encouraged so that the major firms stepped up to buy the positions of failing specialists.

But I want to know whether the capital requirements for specialists on the exchange are strong enough so that they are able to conduct good markets.

Senator HEINZ. Are capital requirements the same as financial integrity requirements?

Mr. RUDER. Well, I think I put those into the same area.

Senator HEINZ. All right.

Mr. RUDER. Financial integrity talks probably about whether the firm is going to fail. Capital, net capital requirements are our technical regulation for how much capital you have to have.

Senator HEINZ. Maybe I misstated my original question. In terms of whether firms traded put their own firm's interest ahead of their customers' interest, are you looking into that?

Mr. RUDER. We are going to look into the practice sometimes called frontrunning. Yes. It's going to be hard to get information, but I want you to know that we are going to do our best to interview these brokerage firms directly to find out what they were doing.

Senator HEINZ. You mentioned that on Tuesday, October 20, 90 stocks did not open for maybe all day, but certainly for a very long time. Were those the stocks that were principally involved with portfolio insurance?

Mr. RUDER. The 90 stocks that were not open during what was the crucial period, really around noon on Tuesday, constituted approximately 20 percent of value of the S&P 500 Index. Indeed, there were sufficient numbers of them closed so that the Chicago Board Options Exchange rule kicked in to close its index options when a sufficient number of the component stocks are not available for trading.

Senator HEINZ. Now, one of the things that you didn't mention in your oral statement but you do refer to it on pages 19 and 20 of your prepared testimony is the issue of margin requirements. You say the Commission will actively consider whether even higher margin requirements for futures would bring these products more into line with stock margin levels while helping to reduce the leveraging which may be associated with derivative product trading.

Now, the Federal Reserve sets margin requirements for stock purchases now, do they not?

Mr. RUDER. For stock purchases, that's correct.

Senator HEINZ. Why should the Federal Reserve not be the agency to set them for index futures and similar products?

Mr. RUDER. I don't have a clear answer about who should be the margin setter. I do know that one wants to look very carefully at the difference in the reasons for margin requirements between the stocks and the derivative products, the indices. The Federal Reserve sets its margins in order to be concerned about credit in the markets. That comes out of the 1929 crash.

The so-called margin requirements in the options index and the futures are more deposits in order to assure that there will be the ability to pay. So we are dealing with a different use of this, and I think not only does one have to worry about whether the same organization puts in margin requirements, one has to worry about whether we need to look at the effect of not having credit-related margin requirements on the index product.

But I don't have a position on that yet. It's one thing that needs to be studied very carefully.

Senator HEINZ. Mr. Chairman, my time is expired, but I would just like to make a 15-second comment.

Senator Domenici, in his excellent comments, made the point that we have been shot at and missed. Well, I don't know what it feels like to be hit, if we got missed. What I worry about is that someone may reload and fire a larger caliber bullet at us with better aim.

### SHOULD THE FED SET MARGIN REQUIREMENTS?

And if we are still talking about whether there should be margin requirements, whether there should be trading limits on futures, whether there should be other methods of dampening volatility, I think we are going to be splattered all over the wall unless we attend to that, which is why I am going to introduce a bill this afternoon to give the Fed authority to set margin requirements.

And anybody who thinks it's a good idea can join me and everybody who thinks it's lousy can oppose it. But I think the Fed has shown they can do it for the equities, and I think they can do it in the other markets as well.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Heinz.

Senator Riegle.

Senator RIEGLE. Mr. Chairman, I have a number of things and, hopefully, we will have a second and maybe a third round here today.

I want to reconstruct a little bit the events on Monday, the 19th, and Tuesday. Let me start on Monday. Can you tell us when on Monday you first spoke with the White House?

Mr. RUDER. Yes, I can, sir. Just one minute.

[Pause.]

Mr. RUDER. I spoke with Howard Baker at 1:30 p.m.

Senator RIEGLE. 1:30 in the afternoon?

Mr. RUDER. Yes, sir.

Senator RIEGLE. Have you met with President Reagan since the 19th?

Mr. RUDER. No, I have not.

Senator RIEGLE. Have you talked with him by phone?

### PRESIDENT REAGAN CONGRATULATES SEC STAFF

Mr. RUDER. Yes, I have. He called me on Saturday afternoon following the first week to ask me how things were going and to congratulate my staff on their excellent work. I was pleased to have that call.

Senator RIEGLE. Have you tried to initiate a meeting like that? Have you thought it might be well to sit down with the President and sort of walk him through these things, or have you waited for them to call you?

Mr. RUDER. No, I have not. But I have been in regular contact with various officials at the White House, and it has been my understanding that the President was being regularly briefed by Dan Cripen and others, and Mr. Baker.

Senator RIEGLE. So, would it be fair to say that as of today you have not yet had an opportunity to really have a substantive, detailed talk with the President about the issues that we are discussing here?

Mr. RUDER. That's correct.

Senator RIEGLE. Let me go back to Tuesday morning. I think it's significant, as you have testified today, that coming down through the prior week, the week before the Monday when the market went down so dramatically, that the market had started to slide downhill and you were quite concerned about it. In fact, you actually—

had set in motion a kind of an emergency team. I don't know that that was the phrase you used, but that you had become concerned enough about the pattern of events that you had put a special monitoring group together. Is that correct?

Mr. RUDER. I had asked Rick Ketchum, our director of Market Regulation, to do so. Yes.

Senator RIEGLE. So I take it that in that prior week, you were concerned enough about just the general tone of things in the markets that you were uneasy?

Mr. RUDER. Ninety-five points down, 58 points down, and 108 points down in 3 successive days were unnerving, to say the least.

Senator RIEGLE. So your group was at work, if I heard you correctly before, over that weekend, in fact, leading up to the Monday where we had the major break in the market; is that accurate?

Mr. RUDER. That's correct.

Senator RIEGLE. Coming through Monday's events and then coming into Tuesday, leading up to noontime on Tuesday when there was this moment in which it was not clear whether the market system was going to be able to continue to function right then, my understanding is that, leaving aside for the moment the New York Stock Exchange, that some of the other exchanges had in fact shut down trading, that the Mercantile Exchange, in terms of their options pit, I think, closed at some point at or about noon. Is that right?

Mr. RUDER. The Chicago Board Options Exchange closed, as I indicated, apparently because these 90 stocks were down. The Chicago Mercantile Exchange closed for about an hour at noon on Tuesday. I think the Chicago Board of Trade remained open.

Senator RIEGLE. Yes. The Board of Trade remained open.

Mr. RUDER. Yes.

Senator RIEGLE. And they were continuing to trade there, whatever the index is that they trade that is derived from stocks?

Mr. RUDER. That's correct.

Senator RIEGLE. Did it in a sense come to a standstill, or was that active trading?

Mr. RUDER. Well, the major markets are the S&P 500 on the Chicago Merc, and the option on the S&P 100 on the Chicago Board Options Exchange. So CBT really was not a significant player.

Senator RIEGLE. I see. So the other two had basically closed at that point?

Mr. RUDER. That's right.

Senator RIEGLE. Now, when you indicate that there were some 90 stocks where there was this order imbalance and they were not able to trade at that time in the late morning on Tuesday on the stock exchange, were some number of those stocks Dow Jones Average stocks?

Mr. RUDER. Yes.

Senator RIEGLE. Stocks that would be part of that index?

Mr. RUDER. Yes, they were. I do not have the names of those stocks, but it has been reported to me that they were, yes.

Senator RIEGLE. So they were not secondary stocks, they were leading stocks?

Mr. **RUDER**. Well, as I say, they constituted 20 percent of the value of the S&P 500, and I don't have an exact number but a substantial number of Dow Jones stocks were involved.

Senator **RIEGLE**. It would be useful, I think, for us to have that for the committee.[1]

### INABILITY TO TRADE WELL-KNOWN STOCKS

Senator **RIEGLE**. So we saw the jam up in terms of the inability to trade in some of the most well-known stocks and stocks that are right dead center in the two widely monitored stock indexes. Is that correct?

Mr. **RUDER**. That's correct.

Senator **RIEGLE**. So that is where the trading had, in a sense, come to a stop. Can you tell us more about the anatomy of why there was that breakdown in terms of the ability for those stocks to trade? Why wasn't there some way to take and develop some match between buyers and sellers? What actually appears to have happened that caused the trading, in a sense, to stop in those 90 companies?

Mr. **RUDER**. The New York Stock Exchange has a specialist system. That specialist system requires the specialists to make the other side of the market. They are charged with market continuity and market liquidity functions in order to be specialists. They have a monopoly system, so there is only one for each stock.

Those specialists, during the events on Monday and the events on Tuesday morning as we began to see a significant decline, were in what the street calls a long position. They had been buying, and there were lots and lots of sellers and not many buyers. What had happened was that these specialists had now, as I understand it, accumulated very large positions in these stocks and more were coming to be offered to them. This phrase wasn't coined in this era, but the specialists do not have an obligation to buy the company. [Laughter.]

Some of them simply said our positions are too long. The problem was not with one specialist having this problem; the difficulty was you had 90 of them, 90 stocks. There were probably specialists in—one specialist may have more than one stock, but if you have 90 specialists with 90 stocks not opening, you get on the floor of the stock exchange this certain kind of panic.

You must remember that that is a personal place. If you have ever been down there on the floor, even on a good day it seems confusing. But I can only imagine what it was like down there that day when these stocks were down.

Senator **RIEGLE**. I will come back. My time is up right now.

The **CHAIRMAN**. Thank you.

Senator **GRAMM**. Mr. Ruder, did you ask the White House or the President to do anything they didn't do?

Mr. **RUDER**. No, I did not.

Senator **GRAMM**. Did you seek any assistance from them that they were not willing to provide?

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[1] Information can be found in the SEC report entitled, "The October 1987 Market Break," by the Division of Market Regulation, February 1988.

Mr. **Ruder**. No, sir.

Senator **Gramm**. Would you have had the President to do anything he did not do?

Mr. **Ruder**. No. I think he worked well, as far as that goes.

Senator **Gramm**. Other than your statement to the wrong part of the media—and I have a hard time telling them apart myself. [Laughter.]

Mr. **Ruder**. One's green and the other is red.

Senator **Gramm**. Be careful about the colors there. [Laughter.]

Other than simply the problem where you were talking about options and people obviously in the crisis of the moment took that as a live option, is there anything you could have done or should have done differently other than monitoring the situation, defining the problem, trying to set up a study to determine what should be done now that this horse is out of the barn to prevent another horse from getting out?

Mr. **Ruder**. Well, on reflection, I think we should have had an emergency crisis plan available to deal with these matters. We did have an informal one, and that was that we were able to deal effectively with the New York Stock Exchange.

I began during these weeks as well to have conversations with Kalb Hineman, who is chairman of the CFTC, and during these next coming weeks I intend to be in contact with him so that we can work out a combined regulatory plan to deal with the next crisis if it should come.

### CRISIS PLAN

Senator **Gramm**. Now, when you talk about a crisis plan, could you just give us a very brief thumbnail sketch of what that would consist of?

Mr. **Ruder**. Well, you want to do a great deal of monitoring. You want to be concerned—and again I can't tell you exactly what it would consist of until we know the facts—but you want to be concerned with the relationship, I think, between the futures and the stock and the underlying stock market, and you want to be concerned with whether there are avenues for finding additional capital to come into the market.

There are some technical things that one can do. Relaxation of some of our rules and urging other markets to do some things. We at one point urged the Chicago Mercantile Exchange through the CFTC to consider delaying its opening so that we would not have the relationships between futures and stocks displayed on the New York Stock Exchange at opening.

I really can't give you a full plan for crisis since we haven't set it up yet.

Senator **Gramm**. Well, in terms of this study, are you going to do this study internally or are you going to try to bring people in from the outside to participate in it? What are sort of going to be the parameters of the study?

Mr. **Ruder**. We are going to use substantial numbers of our own internal staff to do this. It's going to mean that we are going to neglect some other things that we might otherwise do.

But we will be doing statistical studies, interviewing, and contacting exchanges, the other regulatory agencies, and the broker-dealer community itself. Particularly, we will be in close cooperation with the CFTC. We already have some data from them. We are going to use the New York Stock Exchange to give us data. And I have been in close contact with Nicholas Brady and Bob Glauber as executive director of the task force so that they can do some kinds of interviewing that we can't. That organization, that commission is going to have, as I understand it, funds which will come to them on some sort of an emergency basis so that they can get a larger staff to go out and do some field work that we are not able to do with our own staff.

So it is going to be a cooperative venture between all of the regulators and the Brady Task Force.

Senator GRAMM. Let me ask you a final question, as my time is about to run out. One of the concerns I have had in looking at what we might do, say, on margin requirements—and I differentiate between the rules of the game and the technology of exchange. I think looking at margin requirements, looking at the relationship between the futures market and the stock market, I think those are things we ought to be doing. I guess where I think we're getting out of the practice of economic medicine and into witch-doctory is where we start talking about actually trying to interfere with the transmission of information, the actual conducting of business.

It seems to me that the illness, if it exists in the structure itself, is what is behind all that, what produces those decisions and allows them to be carried out at the risk of inadequate equity and other things, not the computer programming itself but the system that allows that to occur.

Do you agree with that or disagree?

Mr. RUDER. Well, I don't exactly know the exact context of your question, but I think I can answer it this way. I think it's very premature to place blame on the futures market and the way it operates or on the stock market and the way it operates. I think I agree that what we need to do is to avoid sudden activity and try to look very carefully at the futures market and the stock market.

It is not altogether clear that one or the other is to blame, if there is blame, and there are certainly good arguments to be made that the futures market actually added liquidity to our stock markets during this period of time, something that may have been beneficial. So you don't really want to say we're going to close one in order to help the other unless you know that that action is going to be the right one to take.

Senator GRAMM. Well, Commissioner Ruder, I would just like to congratulate you for your commitment to try to get the facts. In our business, it's always tempting to rush out and do something. I think it's very commendable that you have sought to get the facts to be sure that when you're doing something it's the right thing. And I support that.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

Chairman Ruder, you have come from the academic world in Chicago to the marketplace in New York now.

### "CONFUSION"

You did use the word "confused," that there was confusion on the floor, I have been on the floor just as a bystander on several occasions, and there is confusion because the market is working there. But isn't it very important for you as Chairman of the Securities and Exchange Commission to never be confused in any way, because the market to a great extent is driven by confidence?

Mr. RUDER. I would hope never to be confused, but I am not perfect.

Senator SHELBY. Were you reacting—we know you're not perfect, but you are in a very responsible position now, and you well know this, probably better than a lot of us. But the market is driven with confidence. There has got to be confidence in the market.

Mr. RUDER. Yes, sir.

Senator SHELBY. And if there is not confidence coming from the Chairman of the Securities and Exchange Commission, what happens then?

Mr. RUDER. Well, let me put aside any doubts that you may have about my abilities to be an active and strong Chairman during this period. I probably have more background in the market field than anybody except somebody who has been down in Wall Street, active in the industry.

Senator SHELBY. This was all brought out in the hearings, and I was one of the ones who supported you, as you well know, not only in the committee but on the floor, and spoke on your behalf. And I recognize that.

But at the same time you are being tested under pressure now, extreme pressure, and when you come out with a statement—or at least it was attributed to you, and you know, we are finding out what the word attribution means these days in politics—that you thought about putting a temporary halt to the market. Some people have written and said that that would have been a disaster.

I would like to hear your comments on that.

Mr. RUDER. Well, I could only report that there was a time on Tuesday when the markets were in a severely battered situation, and we were having conversations with the New York Stock Exchange and the Merc about whether the exchanges should be closed. And this was not initiated by us, it was initiated by the SRO's, and the question was whether this was a good idea.

### REACTION TO A TEMPORARY HALT IN TRADING

Senator SHELBY. Excuse me a minute. Was your initial reaction to do a temporary halt in the trading?

Mr. RUDER. I have to answer that in a more complicated way, if I can.

Senator SHELBY. Go ahead.

Mr. RUDER. I started on the reasons why you might have a halt. The other reason for having a halt is when the markets go into what is called freefall. If you are going to have markets in which nobody is stepping up to buy and no one is ready to buy, then you have to, it seems to me, do something.

But I will tell you that we never got to that position. The markets were strong, and they rebounded, and we did not close and there was not a closing.

I would be very, very, very reluctant to participate in a closing of the markets under the kinds of conditions we were having on Monday and Tuesday. We were dealing with market demand, the forces that were coming out there were—I must say I agree with Senator Proxmire that the markets were in a very much overbought situation and there was an expectation of a reaction, and what you had was a more concentrated reaction than you might have had, with tremendous pressure.

Senator **Shelby**. Mr. Chairman, let me ask you this question. With the market being basically regulated by the Commodities Futures Trading and the stock market basically regulated by the Securities and Exchange Commission, how are you going to be able to work with, or the stock exchange going to be able to work with the Merc and so forth, except by agreement or understanding?

Mr. **Ruder**. We have no authority over the Merc directly.

Senator **Shelby**. I know that. But it would take legislation to do that, wouldn't it?

Mr. **Ruder**. It would take legislation to do that. We had an accord which resulted in legislation, but for the near term I have to work within the regulation which exists, and I have established a good relationship with the CFTC, and I intend to be in constant contact with them so that we can work together if we get another emergency situation.

Senator **Shelby**. Last—my time is up, but I would like to touch on this—how are you going to work with the foreign exchanges: Tokyo, Hong Kong, London and so forth? You can't regulate them, we have no power over them. How are you, going to do it, and is it important to do?

Mr. **Ruder**. Oh, it is absolutely very important to do so. I have already had personal conversations with Sir Nicholas Goodison, the chairman of the International Exchange in London.

We have been—my staff has been in contact with Sir Kenneth Berrill, who is with the new Securities and Investments Board, although it is not in full operation yet, and with other members of his staff. We were already in contact with them with regard to our memorandum of understanding in the enforcement area. We have participated with them in several other ways.

There is a technical committee under the International Organization of Securities Commissioners, which has been meeting together to deal with international problems, and we are going to continue along those lines as well as we can.

Senator **Shelby**. Thank you, Mr. Chairman.

The **Chairman**. Senator Sasser.

Senator **Sasser**. Thank you very much, Mr. Chairman.

Mr. Ruder, here is a copy of Business Week magazine, entitled "The Casino Society." On the front of the magazine it says:

> No, it's not Las Vegas or Atlantic City, it's the U.S. financial system. The volume of transactions have boomed far beyond anything needed to support the economy. Borrowing, politely called leverage, is getting out of hand, and futures enable people

> to play the market without owning a share of stock. The result, the system is tilting from investment to speculation.

Now, the interesting thing about this Business Week article is that this was written on September 15, 1985. The article goes on to talk about the problems of the economy, the problems of the market, particularly leveraging.

In this article, the head of the stock exchange, New York Stock Exchange, Mr. Phelan says, "The markets are leveraged to the teeth." It talks about many of the things we've heard here today: highly leveraged takeovers, buying futures on the margin, program trading.

At the time when this article was written, the Dow stood at 1300. The article ends with the statement, and I quote:

> Only when fear overcomes greed will the casino society rein itself in. The question nagging all concerned is how big a jolt is needed to alter the seductive calculus of speculation.

Now, Mr. Ruder, did I understand you to say here this morning that the Securities and Exchange Commission has no crisis plan in place now and did not have one in place on "Black Monday"?

Mr. RUDER. I think that characterization is not the right one. We had a crisis task force in operation, and we knew what to do during the events preceding "Black Monday." We were in operation. We did do what we needed to do. What we do not have is a new crisis plan based upon the events that occurred, and it's going to be difficult for us to know what crisis plan we should put into effect until we complete our study.

We are doing some things. There are, as I indicated, some things that can be done without a study, but we are not going to rush into a judgment about what has to be done in a crisis, lest we accomplish more harm than we do good.

Senator SASSER. Let me ask you this question. As our Nation's chief securities regulator, do you think we have had excessive speculation in this market; and if so, what is to be done about it?

Mr. RUDER. I am not here as an economic witness, and I do not come to you with advertised expertise in the way the economy is running. I do note for you that the capital markets of this country play an important function. In order for our companies to go to the equity market and go to the bond markets to be financed, it's necessary that these capital markets be healthy. One of my obligations is to be concerned that we do have a healthy capital system.

But I don't think that one can easily state what is too speculative and what is not. One was not finding, I may say, a lot of criticisms of these markets when they were running from 1200 to 2700.

Senator SASSER. Well, I just pointed out an article written in 1985 that is highly critical of it in a major business publication in this country.

Mr. RUDER. Still, if you read the popular press, Senator, in the time between then and now, you were not finding a great deal of criticism about the market runup. In fact, there was a great deal of thought that it was a proper runup.

Now, I will say to you that I am very concerned if we get into excesses in the market. I believe that the credit requirements associated with margins are good. I have been in favor and continue to be in favor of the short sale restrictions on the New York Stock Exchange. As you know, you can't sell stock short on a down tick. There are other things like that which I favor in order to remove excesses, but I can't make an overall economic judgment because I really am not here as and do not consider myself to be an expert in economics.

Senator SASSER. Well, just let me say this, Mr. Chairman, if I may. If what we haven't seen here is not excess, I don't know what is. Now, Mr. Ruder, in your confirmation hearing—and frankly, this is one reason I couldn't support your confirmation.

Mr. RUDER. I understand that you couldn't support my confirmation.

Senator SASSER. Yes.

You said you viewed the current takeover environment as "a circumstance in which the shareholders of the target companies are receiving premiums over present market values of approximately 50 percent in many takeover situations." And you indicated that that was a very beneficial aspect of takeovers.

Now I would like to contrast this—and if that's not speculation, I don't know what is—I would like to contrast this statement with one recently made by Nicholas Brady. He said in criticism of takeovers, "Let's not have drunk driving and speeding on our financial highways. We are, by saying there is no limit to what the shareholder can do to maximize wealth, ignoring every other part of the system."

Now, as you may imagine, I happen to agree with Mr. Brady's statement.

Mr. RUDER. I could imagine you would. [Laughter.]

Senator SASSER. And I agree with him that excessive speculation in takeover stocks artificially inflated stock values: 22 times earnings they were selling for in August of this year. I think that such stock values helped create an overheated market, an overheated market that was ripe for a precipitous fall.

### PLAN TO HALT FUTURE DEPRESSIONS NEEDED

My problem is that, among other things, this fall hurt many small investors, and I think it could lead us possibly into a recession. And I think it's time that if the Securities and Exchange Commission doesn't have a plan, that it develop one.

If we sit here and let market forces determine what's going to happen, I think it could take us right down a path that we've been down before not too long ago.

Mr. RUDER. I couldn't agree with you more, sir. I have spoken to that fact, and I have indicated that we are studying the facts. And among the other things that we're going to study is the question of whether takeover stocks led the market drop or not, an allegation that has been made.

I have told you that we are putting in place a near-term plan for dealing with volatility or other problems if they should arise in the near term, and that based on our study we will be setting forth a longer term plan which we think is advisable for the best interests of this country. And I say to you that I acknowledge that responsibility, and I will carry it forth to the best of my ability.

Senator SASSER. Thank you.

Thank you, Mr. Chairman.

Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman.

We are now in the period where the ground is still shaking, which is a time, I think, to see that we've got our instruments out trying to learn as much as we can. It's not a time which is conducive to major change.

But that opportunity for significant reform is going to occur immediately after the shock waves have receded. I think it's very important that we be prepared quickly to begin to evaluate what has happened and what changes are called for.

In the context of that, when do you think you will be in a position to have some recommendations as to what administrative or legislative changes are appropriate in the context of recent experience?

Mr. RUDER. Senator Graham, we are under a deadline which has been imposed by the President indirectly. The Brady Commission has a 30- to 60-day reporting timeframe for its work, the Brady Task Force. We are expecting to be in contact with them and to give them our preliminary observations and indeed, hopefully, to go public with our observations by that time, which would be some time in December.

We will probably go another step after that considering their findings, and the New York Stock Exchange has a study by Nicholas Katzenbach, which we will want to examine. So we may come forward with still another set of recommendations after the December report.

Senator GRAHAM. So you would say that by early in 1988 we ought to be in a position to look at your recommendations, the Brady Commission, and the Katzenbach study?

Mr. RUDER. I would hope so. I would hope so.

Senator GRAHAM. To continue the point that Senator Sasser has been underscoring about the movement from the capital market to a casino, what is the economic or societal rationale for the securitization of the index and then the use of that as a futures market?

Mr. RUDER. I will respond to you, sir, with what I understand to be the rationale advanced by those that support that system, and that is that there is an advantage in a market to be able to buy and sell positions in that market in a hedged manner so that if you feel that you have too many stocks, that you are too long, you can sell a futures product to offset your risk. On the other hand, you can buy futures and sell securities.

So that you get into a risk transfer or risk prevention mode. That function has existed in the commodities markets as a means of providing price stability and certainty, and that is the justification that is used for the derivative index products.

Senator GRAHAM. But isn't there a fundamental difference in the traditional commodities market, you were dealing with a tangible underlying asset and you might actually get delivered corn or oranges or pork bellies or whatever it was, whereas here you're dealing with a nonexistent statistical item.

Mr. RUDER. It's called a cash-settled commodity, and it is different. It is different. There is no obligation in the futures market for the underlying stocks to be delivered. I think that is one of the things that we are going to want to look at, to know whether the difference is significant or not.

Senator **Graham**. I am pleased that you are going to look at that. And if you could, also examine this rationale that you stated without necessarily endorsing that has been advanced for this. What additional degree of liquidity confidence is contributed to the market by having this new securities available as opposed to maybe additional stimulation for speculation and volatility which it has introduced?

Mr. **Ruder**. Yes, sir. And you should also know that there is a fourth study which will be of interest to us. The Chicago Mercantile Exchange has set up a task force with four leading, I guess I would characterize them, four leading economists whom I have some suspicion will be supportive of the Chicago Merc's position. So they should be presenting us with their rationale which will be one that we can look at as another study input.

Senator **Graham**. My time has expired.

I would just conclude with one further request.

While you drew the distinction between your role as a regulator and disassociated yourself from being an economic theorist, you are in an especially advantaged position to assess the policy implications which underlie your regulatory function. So I would hope that when we meet in January to hear your report, that you will err on the side of being expansive rather than limited in your agenda of recommendations.

Mr. **Ruder**. I should note for you that we have an office of Chief Economist within the Commission, that we have good group of people to advise us on public policy issues, and I will be using them, and also I will be relying upon other Commissioners to come forward with public policy viewpoints.

Senator **Graham**. Thank you, sir.

The **Chairman**. Thank you very much, Senator Graham.

Before I call on Senator Karnes, let me just point out, Mr. Ruder, that before you testified—so this isn't your responsibility—but after our opening statements, the market dropped 28 points this morning, and after you testified, the market went up, so it is still down 16.85, so you have had a very salutary effect. [Laughter.]

Mr. **Ruder**. Could I just make one comment that on the day that my nomination was announced, the market was exactly flat to 2 digits. One of the first times that there was absolutely no movement at all. You can make of that what you will.

The **Chairman**. Well, we need to flatten the market.

Mr. **Ruder**. I'm not sure how to interpret that. [Laughter.]

The **Chairman**. Senator Karnes, do you want to proceed? We have several Senators—one Senator who hasn't had his second round yet.

Senator **Karnes**. I just have one question, Mr. Chairman, if I could, please.

The **Chairman**. All right, go ahead.

## REGULATION OF FUTURES MARKET BY TWO AGENCIES

Senator KARNES. Chairman Ruder, you were quoted in the Wall Street Journal yesterday expressing your concern about the question of regulation of the futures market by two agencies.

Could you elaborate on that subject, describe what, if anything, would have been different, in your opinion, if the SEC had sole jurisdiction over the futures markets?

Mr. RUDER. That is an iffy question. What I can tell you is that we are going to look at the problems that are created for regulation by having two separate regulators. We were not able to go directly to the futures markets to tell them what we thought might be an advisable scenario, and our inability to do that, I think, somewhat hampered our flexibility. As I have indicated a little earlier, what I am going to be wanting to do within the next 2 weeks is to develop with the Commodity Futures Trading Commission scenarios where we can cooperate with them in urging regulation, certain kinds of regulatory measures.

The problem will come if we find that their view of what regulation should be is different than what our view of regulation should be. But I really can't comment on what our differences will be until we have our discussions.

Senator KARNES. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Karnes. Senator Dodd.

Senator DODD. Thank you, Mr. Chairman.

Just a couple of points. One of the observations made in—I believe you may have made it yourself this morning, in passing, and that is the efficiency of the market, the efficiency of the stock market that has heralded. And I must say, I thought John Phelan did an excellent job just as an observer during that period of time. His public statements were first rate and contributed, I think, to the time of real crisis.

I would like to go back to the efficiency question of the market, because it is one that sort of intrigues me in a sense. Stock markets reflect, if you will, the prices of various companies, the underlying strength of those companies.

In fact, one of the arguments given by raiders is that inefficient managers don't pay enough attention to the prices of their own stocks, and that is why you have had so much activity in the merger and acquisition area.

And my question would have to be, the question of efficiency. When you see in as short of period of time as we did, drops of 25 or 30 percent, is that an indication that those companies were really 25 or 30 percent less profitable than they should have been? Where managers that less efficient of these companies? What does that indicate to you in terms of that whole—is the market really efficient to the extent it reflects the strength of companies, or is it inefficient in reflecting that strength?

Mr. RUDER. Well, Senator Dodd, I have never associated myself with the Chicago school of economics and the theory that the efficient market is the true way to look at matters. I happen to think that there are always fundamental values associated with stocks, and that it may be that on a given day or given week or in a given year, the stock's "real value" is not reflected in the market.

It was my personal opinion—when the Dow was at 2700, it was my personal opinion that it was too high. I had investment advisers telling me that the market had broken away from fundamental values, and—if one can put one's amateur hat on—my feeling was that the market was overbought at that time and that there probably would be some reduction in the market prices. What I don't think any of us really anticipated was that this drop would happen in such a volatile manner and in such a short time. I think it is that question that we really need to look at with the greatest of care.

### LIMITATION ON INTEREST IN FINANCING ACQUISITIONS

Senator DODD. I raised an issue at the opening having to do with a question that has been raised. It is a narrow question, but let me raise it again with you, if I may. There has been a suggestion by some, I think more on the House side than the Senate side, having to do with the limitation on the interest in financing, debt financing, for acquisition purposes. I have been told by some that that had something to do with the panic, if you will, if you don't care to use the word panic, but whatever word you care to use, that provoked some of the response we saw on October 19.

Would you comment on whether you think that is a wise suggestion that is being proposed as part of the tax package?

Mr. RUDER. You are asking me to put my tender offer hat on, Senator Dodd, and you heard my exchange with Senator Sasser, maybe you didn't, which indicated my disagreement with him as to the value of tender offers in the United States. It has been my publicly announced view that if a tender offer occurs and shareholders receive a value that that is good. The thought of "killing tender offers" by—as I understand it—by refusing to allow interest deductions beyond a certain point, in my personal view, it would be negative for takeovers and therefore, something that I would not personally support.

Senator DODD. The last question I have for you is, there has been some suggestion—I forget. It may have been the New York Times yesterday, it may have been the Journal, I forget which, indicated that as a result of recent activity, it is estimated that as many as 50,000 jobs in the securities industry may be lost.

Do you have any reaction to that particular comment?

Mr. RUDER. Yes, I do. As you may know, there was considerable concern within the Wall Street firms prior to this drop, that they had too many people, and there were some cut-backs. But we are going to be looking very carefully at the broker-dealer clearance and settlement systems; and, if we find that their systems have not been adequate to cope with the high volumes in this market; and, if, as we must, we can expect there will be high volumes in the future, we are going to—at least if I can have something to say about it, and I hope I will—be urging those firms to keep a back office staff, that will be adequate to deal with customer orders and handle settlement and clearance.

So it may be that there will be some loss in brokerage firm activity, but maybe we are going to see a shift from customer relations people to back office people.

Senator Dodd. Since I have raised the question of the employees of private firms, how about your employees? We are talking about summit meetings and deficit reduction. There is Gramm-Rudman and a lot of other things kicking around. Do you see a need for an increased staff at the SEC to handle what you call an anticipated increase in volume? And if so, how are you going to get around some of these problems we face with reductions in spending in these various areas. And if so, how much of an increase would you imagine you need?

Mr. Ruder. Well, that question is one I could answer either in a short—I will start with a short answer, and if there is any further interest, I will give you a longer answer. I think our staff needs significant increase. I have urged that in the 1989 budget, which is the first budget over which I had any control. I am terribly concerned that the budget reduction talks, talks that are currently going on, are going to either, at best, allow us not to improve our staffing during 1988, or, at worst, cause us to have a reduction in staff. I think if that occurs, it would simply be a disaster for us, when we are in a situation where we are having to meet not only the demands of our current regulation, but demands of crisis regulation plus requirements of engaging in studies. So I am very concerned.

Senator Dodd. Would you call it dangerous?

Mr. Ruder. Pardon me?

Senator Dodd. Would you call it dangerous not to have the increased personnel?

Mr. Ruder. I am in a peculiar position of wanting to say it is dangerous because I think that we need more staff, but wanting to say it is not dangerous, because I have such confidence in the staff that already exists. I don't want in any way to suggest that we are not capable on a crisis basis or in a quality basis or even in quantity basis to deal with near-term problems. I do think that we need to have more staff for planning, more staff for studying, more staff for functions that are now not being carried out the way they should.

Senator Dodd. You would appreciate, as I conclude here, my concerns that what you are suggesting is that we are in a crisis situation, and you have an adequate operation, in view of the crisis, if it occurred tomorrow or the next day.

Mr. Ruder. I do not think that if we have crisis that occurs tomorrow or the next day that my staff will not be able to cope with it. We coped well during this last crisis, and we can cope again, but when we cope with crises, we are diverting from other objectives. For instance, regular broker-dealer examinations, which have to go on. So we need staff for many, many purposes at the Commission and not just for crisis management.

Senator Dodd. I have gone beyond my time. Thank you.

The Chairman. Senator Wirth.

Senator Wirth. Thank you very much, Mr. Chairman.

Mr. Ruder, welcome, and we are glad that you had a chance to come up.

### COMPLAINTS RELATED TO FAIRNESS OF TRADING ON THE FLOOR

Let me ask you about some of the complaints that have emerged related to the fairness of trading on the floor during this crisis. The rationale for your agency is in large part to assure that investors believe that they are being treated fairly and that they have fair access to information. The SEC should assure that there aren't unfair advantages that one individual or group has over another.

Complaints have emerged, as you know, over the last week that individuals had troubles getting orders executed, but large operations, perhaps trading for themselves, in fact, had been able to execute their orders.

Can you reflect upon the validity of that? Do you have enough information to comment on that? If not, how are you going to get a handle on that issue?

Mr. RUDER. As I have indicated, we don't have anywhere near the kind of information we would like to have, but, in that particular area, I can tell you of several factors which did influence that problem. The first was that in many markets the telephone systems were not sufficient to allow calls to be answered by broker-dealers. And there needs to be some change there.

On the New York Stock Exchange, the automated order routing system was disengaged from the futures market, not only, I think, because there might be some problems with the futures market, with the coupling of those trades, but because that order routing system had to be freed up for smaller customer orders.

A third factor which influenced the trade problems were that some of the smaller firms do not use, do not have, their own brokers on the floor of the stock exchange and can't call directly to the post to have their transactions executed. So what they have done is to employ a single vendor who then routes those orders through a linked-up computer system and then back down to the floor, and we understand that there was some queuing at that single vendor, and we need to be able to be in a position to regulate, I think, the people that are providing those services.

Senator WIRTH. It is your sense that over the last 10 days, particularly in the crisis days, the little guy was not treated equitably? The small investor?

Mr. RUDER. Well, "treated equitably" implies some deliberate—some mental state——

Senator WIRTH. Whether deliberate or not, or were the orders that a small investor wanted to have executed, executed as expeditiously as large orders?

Mr. RUDER. My opinion, subject to more information, is that there was a problem in that area, yes.

Senator WIRTH. That the little——

Mr. RUDER. That the small investor was not as easily able to get his transactions to the floor as was the large investor.

Senator WIRTH. Let me ask you then a related question. If we continue to see this kind of volatility in the marketplace, you know, 5 percent changes or 3 percent changes in a given day in this kind of up and down, can we expect the small investor, who isn't on the floor all the time, who isn't watching this happen, to continue to play in the market, to continue to invest in the market?

Mr. Ruder. Yes, I think there are some small investors who will always continue to play in the market. I have publicly——

Senator Wirth. That's not responsive to me.

Mr. Ruder. Well, I——

Senator Wirth. The point that I am making is, the large investor is there watching it all the time. The small investor might say, hey, there's so much volatility in this, I am going to back out.

### SEC CHAIRMAN WILL PROTECT THE SMALL INVESTOR

Mr. Ruder. That very well may be the case. I could imagine a scenario in which the small investor would say, I want to buy shares of a mutual fund, or I want to have my money managed by a professional manager, who will be able to follow the market and do for me what I can't do for myself.

Senator Wirth. Let me say, Mr. Ruder, I think that one of the primary responsibilities that you have at the SEC as Chairman, and that the SEC has, is to do everything you can to protect investors, so that they are receiving a fair break, and I would hope that—I am not suggesting you are not doing that, but I would hope that, as you all are reading the tea leaves, going back and reconstructing what happened, that one of the priorities, might go to the protection of that small investor.

Mr. Ruder. Don't you worry about that, sir, that's already high on my priority list. I would like to take regulatory action so that that small investor did not feel that he or she was being forced away from the market.

You asked me what they might be thinking now. Perhaps when we finish, they will have more confidence that, you know——

Senator Wirth. May I follow up on Senator Graham's question in closing. He asked you about derivative instruments. You did not say what your position was, and I was wondering if we might get your opinion.

Mr. Ruder. Well, my position, as reflected in the October 6 speech which I referred to was that derivative instruments do have some value in the stock market in terms of their hedging capabilities and substitution capabilities. I expressed concern in that speech, and I have even more now, that in times of crisis, high volatility, those benefits may not be sufficient. There may be difficulties in the system, but I just don't have a firm answer at this point.

Senator Wirth. Your position has not definitely changed since October 6, but it might have?

Mr. Ruder. It certainly is influenced by the fact that we have had high volatility days and high volume days, but I need to have facts before I can tell you that my position has changed. We are looking for those facts.

Senator Wirth. My time has expired. Thank you, Mr. Chairman.

The Chairman. Thank you, Senator Wirth.

Chairman Ruder, I think you said that the stock index futures do provide a hedging opportunity for investors, and I would agree, if you said that, that is a prime economic justification for having the futures market operate, but didn't this so-called "portfolio insurance" break down just when it was needed on October 19? Might investors have over accumulated stocks because of the belief and the mirage of portfolio insurance, which did turn out to be a mirage?

Mr. RUDER. Senator Proxmire, I think that theory is one which we very much want to investigate. It very well may be that the institutional investors were oversold on portfolio insurance, believing that they could use this insurance to hedge against market losses. That it very well may be, and I am choosing my words carefully, it very well may be that as a result, they overbought and that as a result, they then found they couldn't get out as fast as they wanted.

So we are going to look at that theory.

The CHAIRMAN. But hasn't it been established as a fact? Do we have to take days or weeks more to investigate it? Isn't it a fact that they simply couldn't get that hedging insurance when they needed it the most?

Mr. RUDER. That has been reported in the newspapers, but I have to tell you that I don't always believe what I read in the newspapers, and I need to know from sources, and we are trying to get exact facts from both the——

The CHAIRMAN. Well, I respect that greatly. You have probably *the* outstanding organization in the country, in the world perhaps. The SEC has earned a well-deserved reputation over the years. It seems to me that you should be able to get that information in a matter of 24 hours. It now has been 2 weeks since the crash took place.

### REPORTING INFORMATION FROM BROKER-DEALERS

Mr. RUDER. One of the things that I want to look into is our ability to get reporting information from broker-dealers. I want to, and I will be insisting that systems be set up so that we can learn what kinds of trading they are going into, what they are doing. We are not able, at this point, at least it is my understanding, to get quick responses from broker-dealers as to their use of various systems.

The CHAIRMAN. I beg your pardon. I was just going to say that the stock index futures are a relatively new development, are they not?

Mr. RUDER. Yes.

The CHAIRMAN. And if they had not been available at the time of the market crash on October 19, would the crash have been as sudden and severe, in your judgment?

Mr. RUDER. My preliminary judgment is that the stock index futures did contribute to the volatility to some degree. I cannot tell you how much.

The CHAIRMAN. Is one alternative to abolish them?

Mr. RUDER. That is an alternative, but I certainly would not be urging it.

The CHAIRMAN. We had years of experience without them, without the kind of enormous drop we had. Is it worth having something that we are not sure is a mirage or not and may not be sure of for a long time to come?

Mr. RUDER. Senator, I was concerned about foreign markets, as I indicated. We have been in contact, for instance, with the Japanese securities markets as to whether or not it might be possible for the Merc to open trading on the so-called "Nikkei" index. And the Japanese have indicated some desire to engage in that kind of trading in their own country. That is an indication to me, and I would be very surprised if, in the event we closed our futures market, there was not the establishment of a futures market in a foreign country, based upon U.S. indices. One gets worried about whether in the new regulatory climate about our regulations here will have the effect of forcing activities overseas which we can't regulate. And I would like to be able to regulate those activities, rather than to force them into some other climate, where they are not as well regulated.

The CHAIRMAN. Senator Heinz and Senator Wirth have both asked about this, the allegation that large securities firms placed trades for the accounts of firm executives prior to trading their client accounts. I am not going to ask you a question on it, but would you provide for the record the trades made by the major firms between October 15 and October 22, for the committee to examine?

Mr. RUDER. When we have that available, sir, we would be very happy to do so.

The CHAIRMAN. Thank you. In your opinion, has the Federal Reserve performed well as the lender of last resort during this crisis?

Mr. RUDER. From what I could tell, they did. We were getting reports, and we were in contact with the Fed. We were getting reports—I don't have them very well substantiated—that the Fed was encouraging their member banks to step up and loan funds to the broker-dealers who might be having problems.

The CHAIRMAN. As far as liquidity was concerned, was that prompt enough, adequate enough, under the circumstances?

Mr. RUDER. Well, we did not have an ultimate breakdown of the market, so I have to say that it was.

The CHAIRMAN. Thank you. I see my time is up. Senator Heinz.

Senator HEINZ. Mr. Chairman. Thank you. Mr. Ruder, on a couple of occasions today, you have discussed some of the reasons it was necessary to suspend trading in certain stocks at certain times, and that the system worked pretty well. This may be true, but I have heard complaints from people on Wall Street that there is a fundamental problem, which is that the Exchange is not geared to create and operate an orderly market once you get over 200 or 300 million shares being traded a day. They don't say that the direct order transfer system can't do it. What they say is, that the specialists at each trading station, a system which you have described as confusing on the best days, simply cannot handle all the stocks that they are responsible for, and that there either should be far more specialists per station or that each specialist should handle far fewer stocks.

I didn't hear you touch on either of those questions in your testimony, didn't see it in your prepared testimony.

Do you have a point of view?

Mr. RUDER. Yes.

Senator HEINZ. Are you looking into that?

Mr. RUDER. Oh, definitely. I think that the market making system, in the exchange system, in the option system and in the over-the-counter system, needs to be looked at to see whether we have sufficient responsible people who are willing to make markets and to see whether they are sufficiently well-capitalized. And that is really what we are talking about, when we talk about whether we have a single specialist——

Senator HEINZ. And how about whether there are enough of them?

Mr. RUDER. Well, interestingly enough, the thing that happened in the New York Stock Exchange was that the failing specialists were acquired by the larger broker-dealers with large capital, and when you have a sufficiently well-capitalized specialist and a specialist that is willing to provide the function of maintaining market liquidity, you will have a successful system. Whether there should be competing specialists or not is an entirely different question.

Senator HEINZ. I am not asking whether there should be competing specialists. I am simply concerned that—and you and I both have been down to the floor on our respective visits—but you have several people clustered at a station, all dealing at the same time on behalf of a specialist for a lot of stocks. It is inherently confusing. Sometimes I wonder how all the people who work as specialists together as a unitary specialist, even though there are many people, how they can keep all of that under control. But you are going to look into that.

Mr. RUDER. We are going to look at it, and I think——

Senator HEINZ. Fine.

Mr. RUDER [continuing]. Answer the question.

Senator HEINZ. Let me move along to a second question you touched on earlier. I think Senator Graham of Florida started to ask you questions about what was really happening, conceptually, when, through stock index arbitrage and portfolio insurance, certain investors sought to hedge or eliminate risk and even lock in gains.

Now I guess my question is this. If the trading exchanges, whether it is in Chicago or New York, are composed largely of transactions, the purpose of which is to eliminate risk from the market, and over time, large volumes of these kinds of transactions take place and people hedge the cash market with the futures market, then hasn't something odd really happened to a market? Hasn't a vital characteristic of a market, namely, risk been removed from the marketplace? Now it may have been transferred someplace else, but a market that operates, in a sense, without the discipline of risk, is a very different creature from markets that have been regulated in the past. I am wondering how you are going to get at that conceptual and theoretical question.

Mr. RUDER. We are going to look at the two markets as though they are one, I think one of the investigatory methods we are going to use is to ask whether, if you look at the two markets as one, there is, indeed, risk elimination, in answer to one portion of your question.

In the futures market, the theoreticians talk about risk transfer as one of the functions, and I don't think one could start with a proposition that we are dealing with risk elimination in the stock market or pure risk transfer in the futures market. But we need to look at the two markets as though they were linked, in order to see what the characteristics are for that single market.

And I really want to have an open mind as to whether we try to link them physically or whether we say, let's cut them apart, so there is no link, or whether we continue somewhat the way we are. Those are very important theoretical and conceptual questions that we are going to have to address.

Senator HEINZ. If I may ask one brief question, then I will cease and desist, Mr. Chairman.

### A BETTER EMERGENCY CRISIS PLAN NEEDED

You indicated earlier that you felt it was important to have a better emergency crisis plan on the shelf and ready to go.

Let me try you with a crystal ball question. As Chairman of the SEC, you have a magic crystal ball that you can consult any time you are in doubt as to what the market is going to do, but the crystal ball has a problem. It only reads 6 months ahead of time, which isn't bad, but you have to consult it every day to know what is going to happen 6 months later. You look into your crystal ball and it says everything bad that you can imagine is going to happen. It says, prepare for the kind of psychology that brought about the 508 point drop. The Germans are going to increase their interest rates. The Japanese are going to enact a value-added tax. The Fed is increasing interest rates. The bond market has fallen out of bed. The Congress just passed a $100 billion supplemental appropriation.

All this will occur on some Monday 6 months in the future. You can throw in a few more, you know, leading indicators, as well. You know, commodity prices skyrocketed today. Inflation is just around the corner, and you say, oh, my God! But the good news is, I've got 6 months to be ready for this.

What are the first three things you do in your crisis plan? What do you do about margins? What do you do about some of the other suggestions like trading limits? What do you do about index arbitrage, portfolio trading, direct order transfer?

Or do you want to take the fifth? [Laughter.]

Mr. RUDER. Well, my answer is, of course, as you might expect, that I can't give you any firm answers until we have done an analysis of what happened in this market.

Senator HEINZ. Oh, I understand that whatever answers you give me would be either hypothetical or theoretical. I am asking you today, based on just a rough sense of what you have to do, if this materialized out of the blue tomorrow, but you've got the advantage of 6 months. And there are some things you can kind of do.

Mr. RUDER. I would want to look at the margin systems. I would want to look at the order routing systems. I would want, most of all, to see what steps could be taken to increase available capital. I do not think that we can ever be in the position of saying that the market's only going to go up. We must expect it to come down in time. What I think we need to guard against is the volatile downside activities, and, to me, the most important thing will be to find a means of assuring that there is sufficient capital to step up to prevent this unnecessary volatility.

And I don't think, by the way, that that is a solution which is one that just the Securities and Exchange Commission can accomplish alone. During that 6 months I might very well be coming to Congress or going to the White House or going elsewhere, going to the Fed to try and talk about what things might be done to be in that position.

Senator Heinz. We look forward to seeing you.

Thank you, Mr. Chairman. I appreciate that.

Senator Riegle [presiding]. Thank you, Senator Heinz.

Mr. Chairman, let me say, I think you have been very candid with us and very frank today, and I appreciate that. You have just come into this job. You have come in at a very difficult time. You and I have talked a number of times over the phone and in person during this period since this stock crash has occurred, and I have found you and your people to be very hard at work, focused, insofar as I can judge, on the right issues. And I think your statement today, which has not gotten much attention, is—I want to say again, is one of the best I have seen in the 21 years I have been in the Congress.

So I appreciate the hard work that is being done.

Mr. Ruder. Thank you.

Senator Riegle. And I realize that we are into a situation here that is new and different and threatening in many ways, and so, working our way through it, I think, is going to require cooperative efforts all around. So that imposes a burden on all of us, I think.

Let me make a couple of comments here, and then I want to pose a couple of questions to you.

I think it is clear, and you have gotten this from the tone of the questions of members today, that this stock market crash has been very damaging in many ways. It has cast a long shadow over what our future economic growth may be. There has been a lot of fall out already. A lot of people have been hurt. Big investors have been hurt in a number of cases, but there are a lot of small investors that have been hurt. I know of cases like that. I am sure you do, as well. And I think one of the lessons at this stage of the game, when it is not precisely clear what the future holds, is that I think small investors have to be very careful and very cautious, because we are in the midst of a turbulent situation. You have said yourself, there are a lot of studies underway. We don't have all the answers yet. It is going to be some time before we have them all. Adjustments that may need to be made will, presumably, be made in due course, but I think until that time, I feel some particular concern about the question of people taking substantial losses that are not in a position to do so.

And I just want to say that at this point, because I think until the picture ahead is clear, I think the people that really can't afford losses have to be extraordinarily cautious and careful.

Now a couple of things seem obvious to me, and I would like to see whether you agree or not. It seems to me that where we stand today, some 2½ weeks after the break on that Monday, is that the financial market system today remains fragile. It remains vulnerable. That is my impression.

Would you agree with that?

Mr. **Ruder**. I would not use the word "fragile." I think that what we have seen is a financial market system which was able to accept the events of the 19th and subsequent events and still is functioning well. We are seeing a market which is working. So—well, I say it has difficulties, but "fragile" is a little hard for me.

Senator **Riegle**. Well, I would just go back to something you said earlier, when we came close to it, to perhaps closing the markets on that Tuesday, I think that connotes a very fragile situation.

Mr. **Ruder**. I could agree with you under——

Senator **Riegle**. And if I put the question a different way, and that is, going back to some of the things that Senator Heinz said earlier, should we—and let's hope we don't see it, but should we experience anything like another down day, where we saw an erosion of value in the Dow Jones average of anything close to 500 points, from where we are today, the impression that I have is that that would impose a new level of structural damage that I don't think it would be healthy for us to experience or to have to cope with. And would you share that view, that it is important for us to avoid another drop, anything on the order of what we have had here?

### ANOTHER 500 POINT DROP WOULD BE MORE SERIOUS

Mr. **Ruder**. Yes, sir. I think if we found another 500 point drop in the market, we would be looking at an even different circumstance and more serious one than we have today.

Senator **Riegle**. Well—and I raise that, not to set off any acute sense of alarm, but rather to focus on the fact that we have got some work to do, and I think we've got to move a lot faster than we are, and I address this comment now, and not so much to the SEC, because I think you are working as hard as you can within the limits of what you have to work with, and frankly, you are understaffed. You were very delicate in terms of how you said it today, and I appreciate that fact, but here we sit with the Gramm-Rudman automatic cutting mechanism coming at us here, in the absence of any kind of budget package, would actually reduce the size of the SEC staff now, unless we were to take some clear step to prevent that.

That is to prevent a reduction. In fact, I think we need a substantial addition. And it should be noted that the SEC pays for itself. You have a user fee system, where you actually generate a profit for the Government, in terms of billing out your cost, and so the notion that somehow we are saving money by squeezing the SEC down in its staff resources, I think is the height of foolishness.

Mr. **Ruder**. Last year, our revenue was $263 million, and our budget was $114 million.

Senator **Riegle**. Well, that is exactly the point. And so the notion that somehow we save something by squeezing the SEC down to a smaller and smaller size at a time when we have had all of these market developments, I think the markets have been tested in the most severe way since the late 1920's, that we have got to have the staff here.

Now I want to make one other observation here that does not relate directly to the efforts of the SEC, but they are the backdrop against which this whole situation, I think, has to be assessed.

### PRESIDENTIAL DISENGAGEMENT QUESTIONED

I think we've got a serious problem here of Presidential disengagement from these problems. Now when you indicated to me earlier in a direct question that you have not yet met directly with the President since this market break of 2½ weeks ago, I find that an astonishing fact, and it is a disturbing fact.

The Brady Commission doesn't exist yet. The crash happened 2½ weeks ago. The people of that Commission haven't even been named, and the thought was that we would have something done within 30 or 60 days, and we don't even have a working group that is under way as yet. I don't think there is any excuse for that.

There has been no executive effort to beef up your staff. You are under these tremendous budget pressures. Your people are working 7 days a week. You are shorthanded, and despite the fact that your people, I think, are doing all that we could ask them to do under the circumstances, I mean, they are not made out of iron. They need help, and you should be offered help, and the administration should be, in fact, giving you the kind of additional help that it is clear to, I think, every outside observer you need at this point.

The budget task force that is meeting, that Senator Domenici went to join is certainly not making measurable progress that one can see. The days are ticking by. The only meeting that I understand the President attended was the first day. It was a sort of a ceremonial participation, and he has not been involved since.

I am not sure we are going to be able to get hold of things the way we need to, if we are going to have disengagement of that sort in the most important office in this country. And I say that to everyone who has a serious interest in stabilizing this situation. We need all the confidence builders we can get right now, and we need more than we are presently getting, and we are seeing that in terms of this turbulence in markets around the world. And I think, unless we can show a demonstrable tightening down of specific steps here, if there is any continuing sense that we are going to drift along here without nailing these things down and moving as far as it is possible to move, I think confidence could turn against us. I think that would be an enormous danger to this country and to the world financial system.

I think we are in that risk situation now. I don't think we should accept it. I think if any of us who have any part to play, large or small, show willingness to accept it, I think we are failing in our responsibility to the public interest. I think this situation is not over. I think it is deadly serious. I think every hour and every day that passes is an important time for us to use. And while I appreciate the effort that you are putting in at the SEC, and I think you are working to the limits of what you had to work with, you need help from other directions, starting with the President, his administration and the Congress, and we need to be moving in a way that, frankly, we are not at the present time.

I am very concerned that we may find ourselves tested again, because of competence factors or market psychology, before we are ready to deal with it, and if we were to get hit again, coming now from this situation, it poses an entirely different kind of danger. It poses a danger to the structure. It poses a danger to people who could sustain windfall losses, that I think, in many cases can't afford to even think about having them. There is no reason to leave the country in this kind of a risk position.

So I am hopeful that one of the things that can come out of this hearing today is the fact that by getting the focus on these questions, we can begin to get a serious application of effort by others, who I have enumerated here, way beyond what we have seen today. The clock is ticking. We are 2½ weeks down the road, and a whole host of steps have to be taken right now that have not been taken.

So hopefully, we will see some action in that regard. I don't know if you want to make any comment. If not, I am going to yield to Senator Karnes.

Mr. **Ruder**. I have had enough time, I think, to talk.

Senator **Riegle**. Senator Karnes.

Senator **Karnes**. I would like to follow up on Senator Riegle's comment, and you may have—I apologize for getting here late, and you may have already addressed this adequately in your opinion, in your statement or in other comments to members of this committee. However, I would like to specifically ask if you would wish to make some recommendations, in addition to what you have already stated, to this committee as to what Congress should be doing, if anything, at this point in time. I think Senator Riegle's statement and the statements of my colleagues underscore very clearly the concern that many of us have, yet I think the reason for a hearing of this nature is to one, get information, and two, seek some counsel to a certain degree, and do you have some things that you would like to leave with us, in addition to the, I think, vitally important information that you have shared with us already about the staffing needs of the Commission.

So if you have not adequately had the opportunity to maybe change your hat a bit and consider yourself coming up on the other side of this table, and what would you be recommending, if you were in that situation?

### TOO EARLY TO MAKE RECOMMENDATIONS

Mr. **Ruder**. Well, I have indicated that my basic position is that we want to study what has been going on. We want to get more information from the exchanges and see if we want to see what kinds of information will come out from the Brady Task Force. We want to hear from Katzenbach, the New York Stock Exchange study, and from the four scholar Chicago Mercantile Exchange study, and, at this point, I am very reluctant to make any judgments about where we will be going, not to say that we won't be making judgments and we won't be making recommendations, but it is simply too early to do so. We have a very extensive study program underway, and we can identify certain problems. Now whether we can have enough information to recommend solutions, I think really is something that has to wait until another day.

Senator KARNES. Thank you, Mr. Chairman.

Senator RIEGLE. Thank you, Senator Karnes. Senator Wirth.

Senator WIRTH. Thank you, Mr. Chairman. We have coming up at us on March 1, the end of the moratorium, which means that we have time between now and March 1, to make some very fundamental decisions on the law which regulates, not only the securities industry, but banking's relationship to that, commerce, insurance, and so on.

Given that very tight timeframe, and given the events of the last 3 weeks, what lessons have we learned that we should apply to our thinking on rewriting Glass-Steagall, if we should do anything at all?

Mr. RUDER. We were in the middle of preparing our Glass-Steagall testimony before this crisis hit, and our effort was to look at the Glass-Steagall problems to see whether, if Glass-Steagall were repealed, we could have an adequate series of recommendations for Congress. And we have not yet reached a policy position at the Commission as to whether or not Glass-Steagall should remain.

I think what we did see in this last situation was a clear need to examine the interrelationship between the banking system and the securities system, first, with regard to the question of whether adequate capital could be made available to the securities industry, and second, as to whether or not ownership by banks of securities industry firms would impose unacceptable risks on the banking system.

I think those are issues which need to be looked at in great detail.

Senator WIRTH. Let me ask you if you were in the process of drafting your position, then the crash occurs, when are we going to get from you your position on Glass-Steagall?

Mr. RUDER. Whenever we are called to testify, we will have it.

Senator WIRTH. We presumably would ask you when you are ready with that position. I mean, you said you were in the process of doing it. I am not being obtuse. I think you are a little bit, and when are you going to have your recommendation done?

Mr. RUDER. Well, as I say, we wanted to do two things. We wanted to draft the testimony, but then I wanted to go back to the Commission to get a Commission position.

Senator WIRTH. How long is that going to take to get a Commission position?

Mr. RUDER. Depending upon how much the market problems get with us, I would presume that we would be able to come to a Commission position by mid-January, something like that.

Senator WIRTH. Let me remind you what the calendar looks like, and if we are not going to have a Commission position until mid-January, that gives us the month of February to rewrite an enormously complex piece of legislation.

Do you think that is possible to do that?

Mr. RUDER. I don't know what Congress' crisis management plans are [laughter] but I am willing to say that if you want us to accelerate that schedule, we will try to come back to you in early December, if that is what you need.

Senator **Wirth**. It seems to me that, looking at the timeframe, it is going to be very, very difficult to do in any case.

Mr. **Ruder**. I agree.

Senator **Wirth**. Don't you agree?

Mr. **Ruder**. It is hard to go from reports to legislation.

Senator **Wirth**. So therefore, isn't it realistic to, perhaps, ask you to get back to us, sooner rather than later? I would think, Mr. Chairman, that would be something that we would want to do.

Mr. **Ruder**. I think—we had an earlier date to be with you. I was trying to get the exact date, but we can do—if you wish, we can work toward an early December deadline.

Congressman Markey gave us a December 1 deadline, which I think may still be with us, although I haven't spoken with him recently about that.

Senator **Riegle**. Would the Senator yield just for a moment on that question?

Senator **Wirth**. Certainly, Mr. Chairman.

### UNRESOLVED ISSUE OF DEFINITION OF INSIDER TRADING

Senator **Riegle**. We have to acknowledge that you're in the midst of honest-to-goodness crisis management here. You at least have been over the last 2½ weeks, and there is also the unresolved issue of the definition of "insider trading." We've got a number of issues that we are involved in trying to resolve.

So given the additional problems of all the market turbulence in sorting through all that, which we have also asked you now to do on a priority basis, to reconstruct what happened, I can see why it will really strain everyone to do that, although I think at the same time, Senator Wirth makes a good point. If we are not going to get a clear recommendation or if the Commission is divided, and if it is, by the way, I hope that we will be told that, we have to work that into our considerations.

Mr. **Ruder**. We will try to strain different people. I guess that is all I can tell you, that if you ask us to do that, we will try to use different people, who are not involved in our market studies.

Senator **Wirth**. First things first, in all of this. And I think that, the current situation, obviously, demands your attention and that of the other Commissioner and your best people, and that is as it should be.

The point that I was trying to make is to identify a very difficult timeframe. Maybe what we should just do is be realistic about this and extend the moratorium. I know that sends shivers up the spines of all kinds of people, in light of the events of 2 weeks ago Monday, and the current calendar might suggest that.

Do you agree? I heard Mr. Greenspan testify that extending the moratorium would be a bad idea. I simply don't have a view on that right now. My hope would be that Congress would act as quickly as it could on the legislative proposals, whether or not the moratorium is extended for several months is not something that I really have a clear view on.

Senator **Wirth**. What is your opinion of what we learned out of the events of 2 weeks ago Monday? Arguments were made on the one side, that had commercial banking houses been able to become involved in investment banking, that it would have been even a greater disaster than it was, that that would have pushed into a whole variety of Continental Illinois type of situations. You've heard those arguments.

The argument on the other is, that had commercial bankers been involved with it, more adequate capital would have been available, and that would have been a stabilizing influence. I gather that those are the arguments on either side. Is that right?

Mr. RUDER. I think you have it, Senator.

Senator WIRTH. What is your position on that?

Mr. RUDER. I don't have a firm position on it. What I would like to look at, and we are still looking at it, is whether or not we could put on—at least on the securities side, whether we could put regulations in place which would protect the securities affiliate from having capital withdrawn in times of crisis. Now we don't know whether that happened or not. I doubt that it did.

From the banking side, I suppose one would want to look at the question of whether the collapse of a securities affiliate might pull the bank down with it, and that is a banking regulator's question, one which I don't know that we will be making a recommendation on. We would probably recommend that that question be looked at very carefully.

Senator WIRTH. Well, Mr. Ruder, thank you very much for being here. As Senator Riegle said, you have come in at an extraordinarily difficult time, and I respect the great problems that you've faced and your fortitude this morning.

Thank you very much.

Mr. RUDER. [Laughing.] Thank you.

Senator RIEGLE. One final question, if I may. The self-regulatory regulations, which the SEC has to rely on to a very great extent, to deal with the day in and day out operations of the marketplace. As we have gone through this severe period of difficulty and testing, how well, do they seem to be functioning in your view, and does it look like, there are some problems in that area, or do you feel quite well satisfied with the self-regulatory organizations, in terms of how they have been performing, particularly over this last 2½ weeks?

Mr. RUDER. Unless I find something to the contrary in the studies, I would report myself as being highly satisfied with the functioning of the self-regulatory organizations over the last few weeks. I think they have been responsible and responsive and communicative, and they have been good listeners and good information providers. So I have been very, very pleased.

Senator RIEGLE. I would just say, in closing, that I think all of us who have particular positions of responsibility in this area at this time, and certainly, you carry a very major portfolio of responsibility for our Government and our system and our people, as you well know, and I think it is essential that if we find here, that some of the things that need to be done aren't being done, that I think it is essential that every manner of effort be made to try to get those things to happen. And I think it is important for you to be forceful. That doesn't mean that you necessarily say anything publicly. You may or may not.

But the point is, I think, to the extent that things have to be moved around and moved into place here to stabilize this situation, strengthen confidence, shore us up against another real shock on the downside, I would hope that you would feel that you would have the support of all of us here in the Congress and on the committee, to be as forceful as you feel you need to be and to be as blunt and as hardnosed in talking with everyone that you have to deal with, as the situation requires.

I think you happen to be one of the few people here that can really create a sense of urgency, when and where it needs to be created, and I would just urge you to recognize that as a—not only a critical responsibility, but one in which you will have support and that you will not find yourself, out there all alone.

And so I would urge you to weigh that very carefully.

I want to say again, I appreciate the job you are doing. The number of times that we have spoken, your willingness to be forthcoming, and your willingness to be forthcoming today, I think is very much to your credit. These are tough days, and if we all work together, I think we will get through them. And that is certainly the requirement that circumstances have imposed upon us.

So thank you for your answers today, and we look forward to having you in here again.

Mr. RUDER. Thank you very much.

[Whereupon, at 1:15 p.m., the hearing was adjourned.]

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Hirsch Memorial Lecture
New York, NY
May 15, 1984

# ON THE EFFICIENCY OF THE FINANCIAL SYSTEM

James Tobin

The United States, as befits the major capitalist economy of the world, has the largest, most elaborate, most sophisticated financial industry in the world. New York is rivalled only by London, which thanks to long-standing international connections and experience, maintains a financial role disproportionate to Britain's declining position in world trade and production. Moreover, finance is one of America's rapid growth sectors.

Just the other day, the New York Times listed forty-six business executives whose 1983 compensation (salary and bonus, exclusive of realizations of previously acquired stock options) exceeded one million dollars. What struck me was that sixteen members of this elite were officers of financial companies.[1] No wonder, then, that finance is the favorite destination of the undergraduates I teach at Yale, and that 40 per cent of 1983 graduates of our School of Organization and Management took jobs in finance.[2] Their starting salaries are four times the poverty threshold for four-person families. All university educators know that finance is engaging a large and growing proportion of the most able young men and women in the country. Later in the lecture I shall present further information on the economic size of our financial industries.

Fred Hirsch, gifted economist and social critic, took all institutions, private as well as public, to be fair game for analysis and evaluation. He was not willing to assume on faith or principle that "markets" work for the best, or to blame distortions solely on government interventions and regulations. Nor did he have illusions that legislatures and bureaucracies work for the best. In the same spirit I decided to use the rostrum which you have given me as Hirsch lecturer to voice some skeptical views of the efficiency of our vast system of financial markets and institutions. These views run against current tides -- not only the general enthusiasm for deregulation and unfettered competition but my profession's intellectual admiration for the efficiency of financial markets. Finance theory itself is a burgeoning activity in academia, occupying more and more faculty slots, student credit hours, journal pages, and computer printouts, both in management schools and in economics departments. And as the newspapers have been reporting, finance academics are finding their way to the street.[3]

Efficiency has several different meanings: First, a market is "efficient" if it is on average impossible to gain from trading on the basis of generally available public information. In efficient markets only insiders can make money, anyway consistently. Whatever you and I know the market has already "discounted." The revealing standard anecdote goes like this: Finance professor is walking on campus with his research assistant, who says, "Professor, I see a twenty dollar bill on the sidewalk. Should I pick it up?" "No, of course not, if it were really there, it would already have been picked up." Efficiency in this meaning I call information-arbitrage efficiency.

A second and deeper meaning is the following: A market in a financial asset is efficient if its valuations reflect accurately the future payments to which the asset gives title — to use currently fashionable jargon, if the price of the asset is based on "rational expectations" of those payments. I call this concept fundamental-valuation efficiency.

Third, a system of financial markets is efficient if it enables economic agents to insure for themselves deliveries of goods and services in all future contingencies, either by surrendering some of their own resources now or by contracting to deliver them in specified future contingencies. Contracts for specified goods in specified "states of nature" are called in economic theory Arrow-Debreu contracts. Kenneth Arrow and Gerard Debreu showed rigorously that a complete set of competitive markets of this kind is necessary and, given some other conditions, sufficient to guarantee the existence of an equilibrium with the optimal properties intuitively perceived by Adam Smith and succeeding generations of free market theorists.[4] I call efficiency in this Arrow-Debreu sense full-insurance efficiency.

The fourth concept relates more concretely to the economic functions of the financial industries. They do not provide services directly useful to producers or to consumers. That sentence is an overstatement, because some people enjoy gambling per se, and prefer the securities markets to casinos and race tracks. But the resources devoted to financial services are generally justified on other grounds. These include: the pooling of risks and their allocation to those most able and willing to bear them, a generalized insurance function in the Arrow-Debreu spirit just discussed; the facilitation of transactions by providing mechanisms and networks of payments; the mobilization of saving for investments in physical and human capital, domestic and foreign, private and public, and the allocation of saving to their more socially productive uses. I call efficiency in these respects functional efficiency.

Before discussing the American financial system in terms of those four criteria of efficiency, I want to point out that the services of the system do not come cheap. An immense volume of activity takes place, and considerable resources are devoted to it. Let me remind you of some of the relevant magnitudes.

Item: The Department of Commerce categories Finance and Insurance generate 4 1/2 - 5% of GNP, account for 5 1/2% of employee compensation, and occupy about 5% of the employed labor force. They account for 7 1/2% of after-tax corporate profits. About 3% of personal consumption, as measured by the Commerce Department, are financial services. These figures do not include the legal profession. It amounts to about 1% of the economy, and a significant fraction of its business is financial in nature.[5]

Item. The measures just reported do not tell the complete story. They cover only the value added by the labor and capital directly employed. If the inputs of goods and services purchased from other industries are included, Finance and Insurance use about 9% of the GNP.[6]

Item: Thirty billion shares of stock, valued at a thousand billion dollars, changed hands in 1983. The turnover was 60% of the outstanding shares. Thus the average holding period is about 19 months. Assuming conservatively that costs are 1 1/2% of dollar volume, traders paid $14 billion. In fact, the expenses and after-tax profits of New York Stock Exchange member firms were in 1982 $22 billion, 3 1/3% of the value of transactions. The securities industry employed 232,000 persons, including 61,000 sales representatives, out of approximately 5000 sales offices.

The turnover of stocks in the United States is greater than in any other country. The closest competitors are Japan, 35% Germany, 24%, and Britain, 16%.

Our secondary market in bonds, in contrast to stocks, is very inactive. Annual transactions of $7.2 billion on the New York Stock Exchange are less than 1% of the par value or market value of the listed bonds. For another comparison, consider one-family homes. Annual sales, of which one sixth are new homes, amount to 4 1/2 per cent of the existing stock.[7]

Item: Stocks and bonds are by no means the only instruments traded on organized markets. The pages of the Wall Street Journal report markets in options as follows: 4000 contracts on 475 common stocks varying in date and striking price; 100 contracts on 15 stock indexes; 60 contracts on 5 foreign currencies, 11 contracts on 3 interest rates. There are also some five hundred futures contracts traded, varying as to future date, covering 40 commodities, 5 foreign exchange rates, 10 interest rates or bond prices, and 6 stock indexes. There are even 100 "futures options" contracts. Transactions volumes in all these markets are substantial but difficult to measure in terms comparable to transactions in primary securities.

Item: Our 15,000 commercial banks do business from 60,000 banking offices, one for every 3800 persons. The operating expenses of commercial banks were $61 billion in 1982. Of these $10 billion were

annualized "occupancy expenses," $170,000 per office.[8] In addition 4,250 savings institutions with 25,750 offices had operating expenses of $14 billion.[9]

Information-arbitrage efficiency. The long-standing judgment of almost all academics in economics and finance is yes, securities markets are efficient in this sense. The first study to indicate this result was by Alfred Cowles, the founder of the Cowles Commission, now the Cowles Foundation at Yale. An investment adviser himself, chastened by the stock market's gyrations from 1928 to 1933, he showed statistically that an investor would have done at least as well choosing stocks at random as following professional advice.[10] His conclusions have been confirmed many times in different ways. As a statistical matter actively managed portfolios, allowance made for transaction costs, do not beat the market. Prices are a random walk in the sense that their correlations with past histories are too weak to be exploited profitably.[11] These findings contradict the claims of "technical" analysis. They suggest, in general, that the mathematical expectation of return from resources used in active portfolio management is zero for the clients of brokers and investment advisers and for the owners of mutual funds.

Efficiency in information-based arbitrage does not come free. It requires resource inputs from arbitrageurs, specialists, market-makers. Random walking does not, of course, mean that prices are unresponsive to new information. To the contrary, it means that they respond promptly and fully -- and conceivably with little or no trading.

Fundamental-valuation efficiency. This brings me to the second kind of efficiency, the accuracy with which market valuations reflect fundamentals. Efficiency in this sense is by no means implied by the technical efficiency just discussed. There are good reasons to be skeptical.

The fundamentals for a stock are the expected future dividends or other payouts, or what amounts in principle to the same thing, the expected future earnings. The stock's value is the present discounted value of either of these streams. Casual observation suggests that the market moves up and down much more than can be justified by changes in rationally formed expectations, or in the rates at which they are discounted. This suspicion has been rigorously verified by my colleague Robert Shiller.[12] Evidently market speculation multiplies several fold the underlying fundamental variability of dividends and earnings.

Shiller has also demonstrated the analogous empirical proposition for the bond market.[13] The yield of a long term bond is in principle a kind of average of the short term interest rates expected to prevail in sequence from now to the bond's maturity. Bond prices fluctuate much more than the variability of short rates can justify. Stephen Golub and others have shown that foreign exchange rates are excessively volatile relative to fluctuations in trade balances.[14]

Equity prices have been a puzzle for the last decade, falling well below the replacement value of the underlying capital assets and the present value of the pay-outs those assets could be expected to earn.[15] Among the hypotheses advanced was one by Modigliani and Cohn, that the market was not allowing for inflation in the streams of earnings and dividends but was discounting real streams by interest rates containing substantial premiums for expected inflation.[16] The

authors made a convincing statistical argument for such irrational downward bias, and corroborated it by quotations from professional market advisers displaying the misunderstanding. The Modigliani-Cohn thesis is controversial and is probably not the whole story. Whatever the sources of the chronic undervaluation, it is evidently nothing that arbitrage could or did correct.

Takeover mania, motivated by egregious undervaluations, is testimony to the failure of the market on this fundamental-valuation criterion of efficiency. A takeover mobilizes enough capital to jump the price of the target stock to levels much closer to the fundamental value of the underlying assets, e.g. Gulf's oil reserves. Ordinary investors might have detected the same undervaluations, but could not expect to profit from them unless and until other ordinary investors agreed -- or a takeover materialized. Takeovers serve a useful function if they bring prices closer to fundamental values. But the fact that markets fail to do so on their own is a serious indictment of their efficiency.

J. M. Keynes likened the stock market -- and he referred particularly to the American market -- "to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view.... [We] have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth, and higher degrees."[17]

Speculations on the speculations of other speculators who are doing the same thing -- those are "bubbles." They dominate, of course, the pricing of assets with negligible fundamentals, zero or vague or nontransferable returns in consumption or production. Gold and collectibles, for example, derive value almost wholly from guesses about the opinions of future speculators. But bubbles are also, as Keynes observed, phenomena of markets for equities, long-term bonds, foreign exchange, commodity futures, and real estate.

Keynes, himself an active and experienced market participant, despaired of "investment based on genuine long-term expectation." "There is no clear evidence from experience," he said, "that the investment policy which is socially advantageous coincides with that which is most profitable." He noted that professionals who bet on long-term fundamentals, while everyone else is engaged in short-term attempts "to guess better than the crowd how the crowd will behave," run greater risks. Not least of these is criticism for unconventional and rash investment behavior. Keynes's views would be confirmed today if he observed how professional portfolio managers seek safety from criticism in short run performances that match their competitors and market indexes.

Keynes's pessimism on the long-term rationality of securities markets led him to the view that the liquidity these markets provide is a mixed blessing. "The spectacle ... has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like marriage, [sic!], except by reason of death or other grave cause, might be a useful remedy ..." But he concluded that illiquidity would be the worse evil, because it would push savers towards hoarding of money. Today that disadvantage seems less serious than when Keynes was writing, during the Great Depression. Anyway, he advocated as a halfway measure a "substantial... transfer tax ..., with a view of mitigating the predominance of speculation over enterprise in the United States." For similar reasons, I have advocated an international transfer tax on transactions across currencies.[18]

Full-insurance efficiency. My third concept is drawn from the purest of economic theory. Arrow and Debreu imagined a complete system of markets in which commodities are defined not only by their physical characteristics but also by the dates and contingencies -- "states of nature" — at which they are to be exchanged. Such a market, for example, would enable me to contract now for an umbrella on the day of the Harvard-Yale football game in 1990 if it is raining that day and if a Republican is in the White House. In exchange, I could sell a promise to give an economics lecture in New York City in 1994 if I am still in good health and the unemployment rate exceeds 8%. Prices set in such markets would clear supplies and demands in advance for all such commodities, with each participant constrained by his or her budget to promise no more than he or she can deliver. Arrow and Debreu showed that this system would realize the claims for the economy-wide efficiency and optimality of competitive markets.

It can be shown further that securities and insurance markets can mimic the Arrow-Debreu system, provided that the menu of available securities "spans" the space of "states of nature."[19] That is, there must be as many different independent securities as there are states of nature. I could get my umbrella with the proceeds of a security that would pay off in the medium of exchange under the specified contingencies at the time of the 1990 Harvard-Yale football game. At a price, I would be insured against those risks.

Our actual institutions fall far short of the Arrow-Debreu vision. There are good reasons. Markets require resources to operate; given their costs, it would be inefficient to have a complete set. Many of them would in any case be too thin to be competitive. "States of nature" are difficult to define and observe. Lawyers and judges would be even busier than they are already on disputes whether contingencies specified in contracts have occurred. Many relevant contingencies are not independent of the actions of the parties; as insurance carriers know, "moral hazard" is a real problem.

Nevertheless, the Arrow-Debreu ideal provides a useful way to look at our actual institutions and markets. The system does some things very well -- e.g. life and disability insurance, even health insurance. It enables individuals and families to trade earnings in their productive years for consumption in retirement and old age. Futures markets allow businesses and farmers to hedge against events that might alter spot prices of commodities they will be buying or selling. Capital markets enable fundamental risks of business enterprise to be taken by the adventurous, while risk-averters content with lower average returns are protected from many possible sources of loss.

Our financial system allows individuals and households considerable facilities to shift the time pattern of their spending and consumption to accord with their needs and preferences, rather

than slavishly conforming to the time profile of their earnings. But it could do better.

For example, the long-term level payment mortgage was a great invention. But mortgage instruments with payments that conform more closely to typical earnings profiles and are flexible in maturity would be helpful to young families, especially in inflationary times. Likewise, older households whose equity in homes is the major part of net worth do not find it easy to consume such wealth while retaining occupancy and ownership. It should not be difficult to devise instruments which would meet their needs. Consumer credit also permits households to advance consumption in time and age, though at what seem exorbitant interest rates. Borrowing against future earnings, against human capital, is much more difficult than against negotiable financial or physical assets. Educational loans would not be generally available without government guarantees and subsidies. They could be longer in term, and lengths and even amounts of repayment could be contingent on the debtors' actual earnings.

The obvious major contingency which our system leaves uncovered is inflation. Twenty-five years ago we thought equities, which are after all titles to real capital goods and real returns earned by their use, were good hedges against inflation. Subsequent experience turned out otherwise, partly because inflation hit us from unexpected sources like OPEC, partly because policies to stem inflation lower profits and raise interest rates. Short term nominal interest rates are better correlated with inflation; consequently variable interest instruments provide rough protection to both debtors and creditors. But the correlation is imperfect. It is not clear why private financial institutions cannot take the next step and develop price-indexed instruments for both savers and borrowers. Those institutions are better placed than the general public to assume the risks of deviations of interest rates from inflation rates. Of course, if the federal government were to issue indexed bonds, -- Her Majesty's Government has done so -- it would be easy for financial intermediaries to offer indexed assets tailored in maturities and denominations to the needs of small savers.

The development of indexed financial instruments, with or without government initiative, would be facilitated by the construction of a price index more appropriate than the present Consumer Price Index. This would exclude the effects of changes in the country's external terms of trade, from shocks to prices of oil or other imports and from movements in the foreign exchange value of the dollar. It would also exclude changes in indirect taxes. These CPI movements are essentially uninsurable for the nation as a whole. An index purged of them is preferable for wage contracts and social insurance benefits as well as for new financial instruments.

New financial markets and instruments have proliferated over the last decade, and it might be thought that the enlarged menu now spans more states of nature and moves us closer to the Arrow-Debreu ideal. Not much closer, I am afraid. The new options and futures contracts do not stretch very far into the future. They serve mainly to allow greater leverage to short-term speculators and arbitrageurs, and to limit losses in one direction or the other. Collectively they contain considerable redundancy. Every financial market absorbs private resources to operate, and government resources to police. The country cannot afford all the markets that enthusiasts may dream up. In

deciding whether to approve proposed contracts for trading, the authorities should consider whether they really fill gaps in the menu and enlarge the opportunities for Arrow-Debreu insurance, not just opportunities for speculation and financial arbitrage.

I turn finally to what I called functional efficiency, the services the financial industries perform for the economy as a whole.

Very few securities transactions are sales of new issues. They amounted to only $100 billion in 1983, and one third of these were issues of financial businesses themselves.[20] Of the issues of nonfinancial corporations, a large share will have represented refunding and restructuring of debt and equity rather than raising funds for new real investments. Even in recent years of high investment, 1978-79, 86% of aggregate gross capital expenditures by nonfinancial corporations could have been financed by internal funds, retained after-tax earnings and depreciation. Retained earnings were in aggregate sufficient to cover two thirds of investment net of capital consumption charges. In the recent recession, internal funds exceeded capital expenditures.[21]

These overall figures, it is true, understate the role of the capital markets. Some businesses with surpluses of internal funds over investment requirements finance the deficits of others, either directly by purchases of securities or, much more usually, indirectly via financial intermediaries. There are no statistics on the gross amount of this activity. However, suppose half of the new nonfinancial securities issues financed capital expenditures by deficit companies -- this seems a conservatively high proportion. Then internal funds would be credited with two-thirds of gross 1978-79 capital expenditures instead of 86%, and only with one sixth of net capital expenditures instead of two thirds. The calculations include as external funds bank loans and short-term paper, 68% of the total, twice as much as the funds raised in securities and mortgage markets. They also include, on the investment side, corporate-owned residential structures and inventories.

What is clear is that very little of the work done by the securities industry, as gauged by the volume of market activity, has to do with the financing of real investment in any very direct way. Likewise, those markets have very little to do, in aggregate, with the translation of the saving of households into corporate business investment. That process occurs mainly outside the market, as retention of earnings gradually and irregularly augments the value of equity shares. Capital markets and financial intermediaries assist this process by facilitating transfers from surplus companies to deficit companies.

Financial markets, of course, play a much bigger role in financing public capital investments of state and local governments and government deficits in general. Through the markets government securities find their way into the portfolios of individuals and, more importantly, of financial intermediaries.

The traditional role of commercial banks is to facilitate the circulation of funds among businesses, channeling the temporary seasonal and short-run surpluses of some businesses to those businesses with temporary deficits. This circulation is closely connected with the diverse rhythms of accumulation and decumulation of inventories of finished goods, raw materials, and work in process, and of inter-business accounts receivable and payable. Some of the

surpluses show up, almost automatically, in excesses of bank deposits over borrowings from banks, while the deficit companies are drawing down their deposits and using more fully their lines of credit.

Banks' intermediation between businesses is mixed with their borrowing from and lending to other types of economic agents -- households, governments, and foreigners. As banking has become increasingly generalized, the word "commercial" has become less appropriate. Likewise, other financial firms and institutions, new credit markets, and even nonfinancial companies have invaded both sides of the banks' traditional commercial intermediation business.

I have noted above that there is little net aggregate transfer of household saving into business investment. Indeed most household saving goes into household investments in residences and consumer durable goods. Commercial banks, savings institutions, insurance companies, and pension funds are vehicles for channeling the surpluses of some households to finance the deficits of others. This is done mainly by mortgage lending and by consumer credit. Since houses, in particular, are beyond the capacity of all but a very few families to purchase from current or accumulated savings, intermediation between surplus and deficit households is a great service to the economy.

A by-product of traditional commercial banking was the provision of a payments mechanism; checkable demand deposits became the predominant means of payment in modern economies. This function, too, is now increasingly shared with other financial institutions and businesses. The link between commercial banking, supplying money, and operating a payments mechanism was more a historical evolution than a planned design. It is logically possible to think of different arrangements, ranging from on the one side a public monopoly in the provision of this public good to complete deregulation and laissez faire at the other extreme. We seem likely to stay in middle of the spectrum, moving in the direction of deregulation.

Total debits to deposit accounts -- check clearings, wire transfers, etc. -- amount to more than 100 trillion dollars a year. A dollar of demand deposits turns over an average of once a day. The bank-operated payments mechanism does a lot of work. From the fact that more than 40% of national clearings are in New York City alone we may infer that more than half of check payments are for the financial transactions described above -- the flip side of them, so to speak. Transactions directly connected with the flow of goods and services probably amount to no more than a quarter of aggregate debits.[22]

Our financial intermediaries are decentralized and competitive. Buy they hardly fit the textbook model of pure competition, where firms too small to affect prices compete in supplying homogeneous products. The applicable model is that provided fifty years ago by Edward Chamberlin, monopolistic competition.[23] Like Chamberlin's firms, banks and other financial intermediaries actively seek the custom of depositors and borrowers by trying to differentiate their products as well as by offering attractive interest rates and terms. Product differentiation takes many forms, among them locational convenience, comfortable premises, personal attention, packaging, and advertising.

Symptoms of monopolistic competition are readily apparent. Like gas stations clustered on the same intersections, competing banking offices are adjacent to each other. Like the products of those gas stations, the financial services differ only trivally. To persuade us of the contrary, monopolistically competing firms resort to a great

deal of advertising. In 1981, banks and savings institutions spent $158 million on local TV advertising. Financial advertising in newspapers of 64 cities amounted to $387 million, 5 1/2% of advertising other than classified.[24] Another symptom is the prevalence of conventional pricing based on the leadership of large firms in the industry -- the prime rate is an obvious case in point.

Many optimistic advocates of financial deregulation attributed the "wastes of monopolistic competition" — Chamberlin's phrase -- to the legal ceilings on deposit interest rates. They correctly observed that banks and other intermediaries were led to fill the profitable gap between lending rates and those ceilings by advertising and non-price competition. They predicted that abolition of the ceilings would eliminate wasteful forms of competition. I doubt that, because the system remains monopolistically competitive even without the regulation of deposit interest and because degregulation itself vastly enlarges the opportunities for product differentiation. One by-product of the regulations was to standardize the deposit instruments banks could offer. Since proliferation of non-standardized products is costly, beyond a certain point it is not necessarily a service to the consuming public.

In other countries, where branching and merging of banks and other financial enterprises are not restricted, the industry is highly concentrated. We are probably moving inexorably in this direction. The number of distinct firms, though not the number of offices, will shrink drastically. Competition will be oligopolistic rivalry rather than Chamberlinian monopolistic competition. There will be some economies of scale in the operations of the payments mechanism, and some improvements in the management of small banks which have comfortably enjoyed local monopolies sheltered by anti-branching laws. But there will be some losses too. The local commercial banker knew his community; at his best, he was a good judge of personal and business risks. Branches of large nationwide lenders following bureaucratic rules are all too likely to deny credit to small new entrepreneurs while their national headquarters take immense billion-dollar risks with foreign countries and big time operators.

Any appraisal of the efficiency of our financial system must reach an equivocal and uncertain verdict. In many respects, as I have tried to indicate, the system serves us as individuals and as a society very well indeed. As I have also tried to say, however, it does not merit complacency and self-congratulation either in the industry itself or in the academic professions of economics and finance. Nor are its shortcomings entirely attributable to government regulations and likely to disappear as deregulation proceeds apace. Here as elsewhere many regulations have been counterproductive. But the process of deregulation should be viewed neither as a routine application of free market philosophy nor as a treaty among conflicting sectoral interests. Rather it should be guided by sober pragmatic consideration of what we can reasonably expect the financial system to achieve and at what social cost. My lecture today presents some of the problems, but I regret I have no sovereign solution to propose.

I confess to an uneasy Physiocratic suspicion, perhaps unbecoming in an academic, that we are throwing more and more of our resources, including the cream of our youth, into financial activities remote from the production of goods and services, into activities that generate high private rewards disproportionate to their social productivity. I suspect that the immense power of the computer is being harnessed to this "paper economy," not to do the same transactions more economically but to balloon the quantity and variety of financial exchanges. For this reason perhaps, high technology has so far yielded disappointing results in economy-wide productivity. I fear that, as Keynes saw even in his day, the advantages of the liquidity and negotiability of financial instruments come at the cost of facilitating nth-degree speculation which is short-sighted and inefficient.

The casino aspect of our financial markets was the subject of a thoughtful and devastating article on commodity futures markets by John Train in the New York Times Sunday May 12th. The author, himself in the investment business, pointed out that speculation in these contracts was a negative-sum game for the general public, thanks to the large "win" of the brokers, estimated at several billions of dollars annually. Only five per cent of the contracts exchanged entail actual deliveries of the commodities. Mr. Train berated brokerage houses for misleading amateur clients into this particular casino.

The case points out the general dilemma. Commodity futures contracts serve a significant Arrow-Debreu function for traders with business interests in the commodity; and since hedging will seldom balance supply and demand, some risk-takers, speculators, are needed in the market too. But Arrow and Debreu did not have continuous sequential trading in mind; when that occurs, as Keynes noted, it attracts short-horizon speculators and middlemen, and distorts or dilutes the influence of fundamentals on prices. I suspect that Keynes was right to suggest that we should provide greater deterrents to transient holdings of financial instruments and larger rewards for long-term investors.

## Footnotes

1. *New York Times*, May 2, 1984, p. D1. The representation of financial executives would be larger except that a corporation is required to disclose compensation only for its five highest-paid officials. The *Wall Street Journal*, May 21, 1984, p. 33, guessed that as many as 15 to 20 officials of Phibro-Salamon, in addition to the five listed, would have been eligible. Furthermore, most Wall Street firms are partnerships or private corporations and do not report. The *Journal* said it was "a safe bet" that the senior executives or partners of several leading firms belonged on the list, very likely at the top.

2. Information on job placements from the School's office of Career Planning and Placement; categorization of positions by the author.

3. Recent names in the news include William Silber and Fisher Black, who left New York University and Massachusetts Institute of Technology respectively. Many others, who have not made the full leap, serve as consultants. They serve not only during vacations from classes; a day a week free for consulting during terms is standard in business schools.

4. Their seminal article is "Existence of an Equilibrium for a Competitive Economy," *Econometrica*, vol. 22, 1954, 265-290. See also Debreu, *Theory of Value, An Axiomatic Analysis of Economic Equilibrium*, New York: Wiley, 1959.

5. Figures from U.S. National Income and Product Accounts Tables, *Survey of Current Business*, U.S. Department of Commerce, July 1983.

6. The 9% assumes the same proportion between direct and indirect expenses on labor and capital as estimated in the 1972 input-output table for the U.S. economy. See "The Input-Output Structure of the U.S. Economy 1972" and "Dollar Value Tables for the 1972 Input-Output Study," *Survey of Current Business*, February and April 1979.

7. Figures derived from statistical reports in *SEC Monthly Review*, U. S. Securities and Exchange Commission, and from *1983 Fact Book*, New York Stock Exchange.

8. Figures based on *Federal Reserve Bulletin*, July 1983, Table A.1, p. 501.

9. Figures from *'83 Savings and Loan Sourcebook*, U.S. League of Savings Institutions, and *1982 Fact Book of Savings Banking*, National Association of Mutual Savings Banks.

10. Alfred Cowles, "Can Stock Market Forecasters Forecast?," Econometrica, vol. 1, 1933, 309-324. Alfred Cowles and Herbert E. Jones, "Some A Posteriori Probabilities in Stock Market Action," Econometrica, vol. 5, 1937, 280-294.

11. Burton G. Malkiel, A Random Walk down Wall Street, New York: Norton, 1973. John G. Cragg and Burton G. Malkiel, Expectations and the Structure of Share Prices, Chicago: University of Chicago Press, 1982. (A National Bureau of Economic Research monograph.)

12. Robert J. Shiller, "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?," American Economic Review, vol. 71, 1981, 421-436.

13. Robert J. Shiller, "The Volatility of Long-Term Interest Rates and Expectations Models of the Term Structure," Journal of Political Economy, vol. 87, 1979, 1190-1219.

14. Stephen S. Golub, "Exchange Rate Variability: Is It Excessive," Chapter 4 of unpublished Ph. D. dissertation, International Financial Markets, Oil Prices, and Exchange Rates, Yale University, 1983.

15. William C. Brainard, J. B. Shoven, and L. Weiss, "The Financial Valuation of the Return to Capital," Brookings Papers on Economic Activity, 1980:2, 453-502.

16. Franco Modigliani and R. Cohn, "Inflation, Rational Valuation and the Market," Journal of Business, University of Chicago, vol. 35, 24-44.

17. This and the quotations and paraphrases that follow come from Keynes's General Theory of Employment, Interest, and Money. New York: Harcourt Brace, 1936, 156-160. The whole of his Chapter 12, "The State of Long-term Expectation" deserves reading and re-reading by anyone interested in these subjects.

18. James Tobin, "A Proposal for International Monetary Reform," Eastern Economic Journal, vol. 4, 1978, 153-159. Reprinted in Essays in Economics: 3, Theory and Policy, Chapter 20.

19. Roy Radner, "Competitive Equilibrium under Uncertainty," Econometrica, vol. 36, 1968, 31-58.

20. Figures on new issues from SEC Monthly Review.

21. Figures for "Sources and Uses of Funds, Nonfarm Nonfinancial Corporate Business," from the Board of Governors of the Federal Reserve System, published inter alia, in Economic Report of the President 1984, Washington: U.S. Government Printing Office, Table B-87, p. 320.

22. Statistics of Bank Debits and Deposit Turnover are published monthly in the Federal Reserve Bulletin, Table 1.20.

23. Edward Chamberlin, The Theory of Monopolistic Competition. Cambridge: Harvard University Press, 1933.

24. Statistical Abstract of the United States 1982-83, Tables 966-968, pp. 567-8.

OFFICE OF
THE CHAIRMAN

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 30, 1988

The Honorable Alfonse M. D'Amato
Committee on Banking, Housing, and Urban Affairs
United States Senate
Washington, D.C. 20510

Re: The October 1987 Market Break

Dear Senator D'Amato:

Thank you for your letter, dated November 12, 1987, in which you pose a number of questions concerning the October 1987 market break. I appreciate your patience in waiting for my reply. As you know, until quite recently Commission staff from the Division of Market Regulation ("Division") were engaged in reconstructing the market events of October and analyzing these events' impact on the securities markets. The Division's report, entitled The October 1987 Market Break (February 1988) ("Staff Report"), contains thorough analyses of many of the issues raised in your letter. Accordingly, the responses below frequently refer to the Staff Report. In addition, where applicable, I have cited my testimony concerning the market crisis before your Committee on February 3, 1988. 1/

Question 1. Does the SEC have regulatory authority over First Options, Inc.?

Yes. First Options of Chicago, Inc. ("FOC") is registered with the Commission as a broker-dealer under Section 15(a) of the Securities Exchange Act of 1934 ("Act"). It is subject to those provisions of the Act, and the rules adopted by the Commission thereunder, which apply to registered broker-dealers.

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1/ See Testimony of David S. Ruder, Chairman, Securities and Exchange Commission, "Securities and Exchange Commission Recommendations Regarding the October 1987 Market Break," before the U.S. Senate Comm. on Banking, Housing, and Urban Affairs (February 3, 1988) ("February 3rd Testimony").

Question 2. How did the SEC and federal banking regulators become aware that Continental Bank violated the rule regarding lending limits to a single borrower?

On October 20, 1987, the Office of the Comptroller informed staff in the Commission's Division of Market Regulation that Continental Bank apparently breached a covenant between itself and the Office of the Comptroller.

Question 3. If First Options had not received the loan from Continental would you have had to close First Options? How many firms have you had to close since October 19, 1987?

It is not clear that FOC was ever in violation of the Commission's net capital rule which would have required FOC to cease business until in compliance. The question is now being pursued by the Chicago Board Options Exchange, Inc. ("CBOE"). Nevertheless, the subordinated loans by Continental Bank and its holding company were significant in averting, at least, liquidity difficulties for First Options.

A total of 58 firms doing business off the floors of the various exchanges had to cease business because they were in violation of the net capital rule. A majority of these firms subsequently obtained additional financing and recommenced a securities business. Only one of the firms that carried customer accounts (H.B. Shaine & Co.) had to be liquidated pursuant to the Securities Investor Protection Act of 1970. A thorough discussion of why these firms ceased operations at least temporarily during the week of October 19 is provided in Chapter Five of the Staff Report at pages 5-7 to 5-10.

Question 4. Were you included in the negotiations of the consent decree entered into between the Comptroller and Continental Illinois? If not, why not?

No. The settlement related entirely to violations of the covenant with the Comptroller. We are not aware of any negotiations in the past between any bank and the Comptroller in which the Commission was included.

Question 5. Can you tell us the particulars of the consent decree entered into by the Comptroller with Continental Illinois? If Continental violates the conditions of this decree, what sanctions would be imposed? Would such sanctions really be imposed since the U.S. government still owns 60% of the bank?

We do not have sufficient information with which to answer this question.

Question 6. Is the SEC continuing to monitor closely the trading activity of First Options?

Yes. The Commission staff has asked the CBOE, the self-regulatory organization that is the designated examining authority for FOC, to provide it with details concerning First Options' positions during the week of October 19, 1987. In addition, the CBOE is examining FOC's activities on a daily basis. Since the market break the CBOE and the Commission's Chicago regional office have conducted an on-site examination of the books and records of FOC. The findings of both groups will be forwarded to the Commission's Division of Market Regulation.

Question 7. Did you have any warning that on Monday, October 19, 1987, the market would be in for a heavy down day? Were you notified about the potential for this sell off, before the market opened?

On Friday, October 16, Commission staff began to anticipate that the markets could experience a huge sell-off on the following Monday. Accordingly, Commission staff began to prepare for the anticipated market volatility on the afternoon of Friday, October 16, continued this over the weekend, and extended the preparation to include monitoring the Tokyo and London markets on the morning of the 19th prior to the New York Stock Exchange ("NYSE") opening. A description of these preparations, as well as our pre-opening briefing by the NYSE staff on October 19, is provided in the Staff Report at page 2-25.

Question 8. What part did foreign markets and investors play in our markets' downturn?

The Commission staff's study disclosed that major world markets responded quickly and dramatically to price movements in other market centers. Events in foreign markets do not appear to have played a major role in the downturn in U.S. markets. Rather, U.S. markets seem to have led foreign markets in the decline. The staff did not find evidence to substantiate rumors that foreign investors were heavy sellers in U.S. markets, and foreign investor activity does not appear to have had a disproportionate effect on our markets. For a more detailed discussion of international market events and foreign investor participation in our markets, please refer to Chapter Eleven of the Staff Report.

Question 9. Could you please explain Portfolio Insurance activity and Index Arbitrage on the market on October 16, 19, and 20, 1987?

A detailed, program-by-program analysis of portfolio insurance activity and index arbitrage on October 16, 19, and 20 is provided in Chapter Two of the Staff Report, as well as the Trading Chronologies in Appendixes A - C and the tables and graphs in Appendix D. The overall effects of these and other forms of program trading during the market break also are discussed in Chapter Three of the Staff Report.

Chapter 10. Do you share NYSE Chairman Phelan's bad "gut" feeling of some types of program trading on triple witching days and do you have any suggestions on what should be done in these areas?

The Commission has believed for some time that efforts should be made to smooth out the price swings sometimes associated with quarterly expirations, so-called "Triple Witching" days, and toward this end has been working with the Commodity Futures Trading Commission ("CFTC") and securities and futures self-regulatory organizations to mitigate this volatility. Remedial measures which already have been taken include: (1) adoption of procedures to disseminate buy or sell order imbalances before the opening and closing of trading on quarterly expiration days for major NYSE stocks, for the purpose of attracting contra-side interest; and (2) encouraging the shift of some expirations to the market opening in lieu of the market close to (a) take advantage of stock opening procedures designed to handle order imbalances and (b) provide the stock market with a full trading session to minimize the price impact of an influx of buy or sell orders on the opening. While experience with these measures has been limited to several expirations, they appear to have helped to correct order imbalance and volatility problems historically associated with Triple Witching Fridays. Our review of trading on those days has not identified evidence of manipulative activity. The Commission will continue to monitor closely the efficacy of current expiration Friday procedures and whether additional or alternative measures are warranted. See Chapter One of the Staff Report at pages 1-7 to 1-8.

Question 11. On Tuesday [October 20], the NYSE asked member firms to resist from using program trading. On that day the Dow Jones Industrial Average ("DJIA") started the day up and at about noon the CME closed trading in index futures for about one hour -- about the same time when the DJIA was off

27 points for the day. You stated that the market was "tested" and turned around, posting a gain for the day. Can you further explain this occurrence?

On Tuesday, October 20, both the futures and stock markets experienced several price surges and reversals. Prices on the leading U.S. index futures market (the Chicago Mercantile Exchange, or "CME") and securities market (the NYSE) opened sharply higher -- shortly before 10:00 a.m. the Standard & Poor's 500 Stock Index ("SPZ") futures on the CME had gained almost 40 points, while the DJIA traded up to a 197.30 point gain by 10:28. The DJIA fell, however, by 227 points, by 12:21, as heavy selling pressure on the CME caused SPZ prices to decline. Market-making capacity on the NYSE became severely strained, causing trading halts to be called in 145 NYSE stocks because of order imbalances. The CME halted SPZ trading at 12:30 p.m. (Eastern Time). Trading in most other index and futures also was halted by this time, with the exception of the Major Market Index ("MMI") futures contract traded on the Chicago Board of Trade.

Beginning at approximately 12:30, the MMI futures rallied, posting a gain of 90 points, and by 1:12 p.m. the DJIA had recovered 126.2 points. The CME re-opened at 1:05, and the rally on the NYSE faded, with the DJIA losing 80 points in 27 minutes. Shortly after 2:00 p.m., however, the DJIA staged another rally, rising almost 170 points. It then declined about 80 points, closing up for the day by 102.27 points.

It appears that the see-saw nature of pricing on October 20 is accounted for by several factors, with the downturns reflecting extreme nervousness on the part of market participants and the depletion of market-making capacity in virtually all stock and derivative markets. Although heavy sell pressure threatened to overwhelm the market-making capacity of the NYSE by mid-day, the NYSE was able to stage a rally as news of pending corporate buy-backs of stock, and assurances of sources of liquidity for NYSE specialists, were announced. Also at this time, stock selling abated and investors looking for "bargain" prices returned to the securities markets to buy.

The interaction between the stock market and the index markets on Tuesday, October 20, is described in detail in Chapter Two of the Staff Report at pages 2-19 to 2-24 and in Appendix A at A-37 to A-43.

Question 12. If the CME futures were still trading and some specialists halted trading in several individual stocks --

does this not widen the spreads on the two markets prices, adding to the escalation of selling pressure? How can we avoid such occurrences?

The halting of trading in index component stocks will affect the apparent discount or premium of the futures contract. Isolated trading halts, however, periodically occur in even non-volatile markets. Most major market participants recognize the difference between real and apparent discounts, and adjust their strategies accordingly. A much more troublesome situation is presented when a significant number of the index component stocks have halted trading or failed to open during periods of extreme market volatility, such as the October market break. (A comparison of apparent and actual discounts in the futures on October 19 and 20 is provided in footnote 49 at pages 2-13 to 2-14 in the Staff Report.) Such situations raise serious regulatory concerns, which are discussed in Chapter Three at page 3-24 and Chapter Eight at page 8-22.

Question 13. Should margin requirements be increased in the futures markets? Why and to what level? What would the effect of higher margins have on current trading?

The Commission supports increasing, at least temporarily, the initial margin levels for stock index futures, to a level between 20-25% for market participants other than local traders on the floor of the futures exchanges. I believe that higher margin levels for off-floor futures markets participants could affect current trading in two ways. First, increased levels may discourage institutions from drastically increasing the velocity of their futures selling when the market experiences a downturn. The October market break demonstrated that the sale of these positions brings significant downward pressure to bear on prices in both the futures and equity markets. Second, higher margin levels may dampen speculative trading that, under normal market conditions, contributes to the perception of almost unlimited liquidity in the futures markets and drives futures, as well as component stock prices, above their intrinsic values. As we have seen, however, this liquidity quickly disappears during a market break, at a rate geometrically larger than in the lower - leveraged stock market, and futures and component stock prices collapse. The issue of reducing leverage in the index futures markets by possible revisions of margin levels is discussed in Chapter Three of the Staff Report at pages 3-20 to 3-22.

Question 14. Do you feel comfortable with the enforcement and surveillance activity of the NYSE and CME on financial futures in relation to the stock market?

The Commission staff is working with the CFTC and the NYSE to enhance current surveillance programs for index-related trading. Similarly, the securities and futures markets have scheduled meetings to discuss intermarket information sharing. The need for enhancements to current surveillance and enforcement programs is discussed in Chapter Three of the Staff Report at pages 3-33 to 3-34. In addition, possible improvements in reporting and record-keeping requirements for program trading are discussed at pages 3-26 to 3-28.

Question 15. Is there enough communication and cooperation between these two exchanges? Do you have any suggestions for the improvement of relations between these exchanges?

Under the auspices of the SEC and CFTC, the staffs of the NYSE and CME are actively seeking means of improving their communication and coordination procedures, particularly for periods of market volatility such as occurred in October 1987. Toward this end, representatives of the CME and NYSE met on February 10, 1988 to begin discussions concerning methods for improved coordination, and all exchanges, including equity, options, and futures markets, met on February 24. Another meeting for all markets took place on March 16, 1988. In addition, then-acting Chairman Hineman and I have sent letters to the Intermarket Surveillance Group urging that it provide for participation of the futures exchanges.

Question 16. In your opinion, is the CFTC undermanned to handle the growing responsibility of the futures market?

The Commission is not in a position to comment on the adequacy of staffing levels at the CFTC.

Question 17. Since the CME and NYSE now interact together (futures contracts and stocks) do they both have operational systems that compliment each other or do the two systems work against each other?

The operational and clearance/settlement systems of the NYSE and CME have evolved separately over the past decades to address the differing needs of their market places. Periods of extreme volatility and heavy trading volume such as occurred during the October market break illustrate the need for these systems to keep pace with these evolving, increasingly interconnected markets. The Staff Report addresses the need for improvements in the NYSE's operational system (see Chapter Seven), while overall improvements in equity clearance and settlement systems are discussed in Chapter Ten. In addition, as noted in the Report of the Presidential Task Force on Market Mechanisms, an effective system for cross-margining futures and securities products would be useful.

Question 18. The Quotation tape was running more than 2 hours behind actual trading -- what effect did this have on the efficiency of the market? Can we assume this is bad when up-to-date quotations can't keep up with the volume? Suggested solutions?

The tape disseminating stock quotations was not running two hours behind. There were delays of as much as two hours, however, in transaction data shown on ticker display devices toward the end of trading sessions on October 19 and 20. At times when trading is heavy, ticker delays are common because the stream of transaction data has to be slowed down so as to be readable to the human eye. The delays on October 19 and 20 were much longer than normal. It is important to recognize, however, that ticker display devices are a secondary source of transaction information. The principal source of current transaction and quotation information for listed securities is the Securities Information Automation Corporation's ("SIAC") "high-speed tape." This information is immediately disseminated to vendors who make it available to the public through recall terminals. The Staff Report found that there were only two brief outages in SIAC's high speed tape, both affecting transaction information but not the dissemination of quotations.

The NYSE believes that it has adequate personnel and facilities to ensure accurate trade and quote reporting and has assured the Commission that it is committed to maintaining this capability no matter what level of activity occurs. For a more detailed discussion of the performance of market information systems, please refer to Section A of Chapter Seven in the Staff Report.

Question 19. Are there any technological improvements that are needed to further advance efficiency or are some systems too far ahead of other trading operations that create a disadvantage of another operation? Our main objective is to have a "fair and orderly market".

The Commission's Staff Report and the Commission's February 3rd testimony identified a number of systems involving order routing, execution, trade reporting, and intermarket communications that should be improved to accommodate heavy trading and volatile market conditions. For example, the Commission has recommended to the NYSE that it increase its efforts to improve order processing by continuing to upgrade order-handling equipment. The Commission also has suggested that the Exchange take certain actions to allow the DOT system to process a high volume of orders more efficiently.

The NYSE has informed us that it currently has underway system improvements designed to handle 600 million share days by the end of 1988. In February 1988 the Exchange replaced its odd-lot system with an upgraded system and it plans by April 1988 to upgrade the limit order system as well, resulting in a 50% increase in capacity.

Question 20. What recommendations can be given to solve some of the wide swings the market has experienced? Do you suggest any legislative or regulatory action? What would you like to see done if this should occur again?

In the Commission's February 3rd testimony, the Commission stated that two factors -- (1) the unified nature of the U.S. markets for stocks, stock index futures, and stock index options, and (2) the existence of new trading mechanisms that can overwhelm the current capacity of markets -- suggest at least three areas for operational reforms. First, the capacity of individual markets to handle peak volume should be increased through operational changes. Second, improvements should be made in intermarket coordination. Third, steps should be taken to retard, at least during crisis periods, the increased velocity and volume of inter and intra-market trading. In this connection, the Commission recommended temporary margin increases for stock index futures. In my written testimony for tomorrow's hearings before your Committee I have indicated areas in which legislation may be necessary.

Question 21. Many of my colleagues complained at the November 4, 1987 hearing that the SEC is understaffed. How would additional staff at the SEC have effected the events of and subsequent to October 19, 1987?

I do not believe that additional staff at the Commission would have affected the events of October 19 and thereafter. During the market break Commission staff worked expertly in monitoring trading data, capital positions of broker-dealers and specialist units, mutual fund activity, and global market movements. In addition, Commission staff maintained close contact with all the self-regulatory organizations, and interviewed key market participants and exchange officials concerning the amount and type of trading being done. Although I believe the Commission was able to handle the events of October extremely well with its then-current staffing levels, the Divisions of Market Regulation and Investment Management have a need for additional staff in light of the increasing complexity of today's markets and the need for heightened levels of surveillance and market monitoring. The Commission presently is increasing staffing levels in these two divisions, and the Commission's proposed FY 89 budget, which I submitted to the Congress on February 22, seeks further increases.

I trust that this letter is responsive to your questions. Should you have any further questions or concerns, please do not hesitate to contact me, or Richard G. Ketchum, Director, Division of Market Regulation, at (202) 272-3000.

Sincerely yours,

David S. Ruder

David S. Ruder
Chairman